

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

DECEMBER 1, 1937



Cladrastis Lutea

Identifying the Lindens
California Memorial Plan
Social Security Exemption Widened
Planning the Catalogue

AMERICAN NURSERYMAN

Chief Exponent of the Nursery Trade

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of nursery associations.

REPRESENTATIVE NEEDED.

Even a casual study of the items of legislation before Congress and the ways in which laws now enforced may affect nurserymen forces realization of the necessity of active representation at the national capital as planned months ago by the American Association of Nurserymen.

The ruling obtained as to the classification of nursery field labor under the social security act showed what can be done by an active presentation of the trade's side of a case, and what happens when it is not presented. The ruling has brought further problems, which will require conference and consultation if nurserymen are to gain the maximum benefits of their classification.

The policy in respect to the enforcement of quarantine 37 is another matter of great importance which requires constant attention if the trade is not to suffer for lack of adequate provision made in time.

The wages and hours legislation proposed by the administration is meeting much opposition. It barely missed passage at the last session of Congress. The time since given for study has led to realization by various interests that the good which might be done would be many times offset by the resulting economic damage.

Any nurseryman knows what happens if he does not plan ahead. The problem of any management is to meet problems before they present themselves in acute form. That job is frequently as important as all the work done by the labor of a large

The Mirror of the Trade

working staff. A major mistake may offset an entire season's ordinary profit.

The industry requires such management with respect to prospective legislation and also the enforcement of statutes already on the books. Our good friend, Charley Chestnut, treats the matter in the old-fashioned political way. Nurserymen look at it as a matter of sound modern management, as a national problem of the first order.

The efforts of the executive committee of the A. A. N. to find a competent man for Washington representative are to be commended, for the work he can do for the industry is of immeasurable value.

STATE COMPETITION.

Apparently some persons in government positions share the belief of uninformed amateur gardeners that one has only to stick seeds or cuttings in the ground to produce a plant and that the cost of production of nursery stock is consequently an insignificant item. Some observation of the income and wealth—or lack of it—of nurserymen long in the business should be convincing proof to the contrary.

But these unobservant persons continue to seek the establishment of nurseries by federal and state governments. The reason for such establishment is usually good. Nurserymen are the first to agree that reforestation by governmental agencies is the solution of a long-standing problem.

But the use of stock from such government-owned nurseries for purposes other than that intended in their establishment is unreasonable and unfair, particularly since knowledge of production costs is absent and prices quoted bear no relation to the value of the stock when government nurseries sell it, or offer it for sale.

This matter has been generally discussed for years. Perhaps it may be brought closer to the attention of those concerned by the letter printed on another page of this issue, relating a specific instance in which a state-owned nursery submitted bids, in competition with commercial nurs-

(Concluded on page 4.)

CLADRASTIS LUTEA.

One of the loveliest of native American trees is *Cladrastis lutea* (long known as *tinctoria*), and yet it is an unfamiliar subject in much of the American landscape. A beautiful specimen of the yellowwood, its common name, is illustrated on the front cover. This shows the typical broad, round head and the profusion of white flowers produced in June. Belonging to the legume family, the *cladrastis* has typical compound leaves and pea-like blooms, which occur in drooping clusters ten to twenty inches long. The bark is yellowish and smooth, clinging tightly to the trunk and branches and suggesting the bark of the beech. The wood is yellow and yields a yellow dye.

Hardy in New England and to Ontario in the east and to at least northern Illinois in the middle west, this tree presents no handicap to its culture on that account in any but the severest sector of this country. Fine mature specimens are to be found in the Chicago region, in spite of the fact that the native range of the yellowwood, sometimes also called the gopherwood, is North Carolina, Kentucky and Tennessee.

Forty-five feet is a good average height for the tree. It is easily propagated from seeds sown in spring, though root cuttings may also be used. In early winter the roots should be dug, cut into 3-inch pieces and stored in damp moss or sand in a cool place, to be planted in the open in spring. Or the cuttings can be started in pots if a greenhouse is available. Since the plants are deep rooters, they should be root-pruned in the nursery to avoid difficulty in transplanting. Also, it is advisable to shape the head, so that too many branches do not develop.

A sunny spot is best for the yellowwood, also a deep rich soil, though the tree will respond excellently in a wide variety of soils. The tree's only apparent bad feature is that the leafstalks tend to persist through the winter, making a slightly unsightly appearance during the leafless months. This is soon forgotten, though, when the tree bursts into bloom in June. The leaves turn a golden yellow in autumn.

AMERICAN NURSERYMAN

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The Chief Exponent of the American Nursery Trade

*The Nurseryman's Forte:
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DECEMBER 1, 1937

No. 11

Identifying the Lindens

*First of a Series of Articles on the Characteristics and Uses of the Species of
Tilia in Cultivation in this Country—By Leon Croizat, of the Arnold Arboretum*

The linden is an old favorite among cultivated trees. It is propagated commercially with success and sold by the thousands. The supply, at least for some species, recently fell below the demand, with the result that the plans prepared by the department of parks of one of the largest cities in the east had to be altered and other trees substituted for the desired silver linden. Under the circumstances one would expect that lindens are well known. Unfortunately, this is not the case. It has happened more than once that the buyer has had little notion of the correct name of the species he wanted to secure, and it is not a secret in the trade that a stock of *tilia* may at any time be delivered in all good faith which is not the kind asked by the buyer.

It is well to have a precise understanding of conditions if something is to be done about them. It is a fact that lindens are not nearly so hard a group of trees for the layman to understand as is generally supposed. In my opinion, elms are, beyond comparison, far more difficult than lindens, and, to express a personal preference, I should sooner tackle any *tilia* that comes along rather than meditate on hawthorns, ashes and buckthorns. Anyone who truly wishes to know lindens has the opportunity of seeing many of them without difficulty because they are commonly planted as ornamental trees. While the slight variations that occur in individual specimens in a whole series of plants may be embarrassing to the student at first, the persistent observer in the long run is assured of a rich

reward. He will be able to identify, in addition to the species, most of the usual varieties and forms.

It has been said that botanical descriptions and keys are written for the benefit of those who already know the plants thoroughly. This statement is not so much of a joke as it sounds. If I say that the leaves of a certain species are larger than those of another, I contribute nothing to the understanding of the listener who has not seen both species. If I state that *Tilia cordata* has leaves smaller than *Tilia americana* I am stating a half-truth because there are trees of *Tilia cordata* with leaves as large as those of certain plants of *Tilia americana*.

In plant identification often much depends on the actual "feeling" of the tree, shrub or herb. Fundamentally, the distinction between textiles is made in the same way. The difference between silks and woolens is not easily described, but once learned is not forgotten. Naturally, to learn it the material must be seen and fingered. This being the case, I make a first suggestion to the reader: See as many lindens as you can, and try to form your own notion of how they differ in "feeling" without making attempts in the beginning to follow up the statements of this or that book. Nothing is ultimately easier than understanding the descriptions of things with which we are familiar. On the other hand, nothing leads to error sooner than trying to fit facts to preconceived generalities.

A second suggestion is almost as important. Take plants for what they are, and do not shy at characters

which many think should be the concern of botanists alone. There is no dividing line between botany and horticulture, because both serve the same master and both seek out facts. If lindens can be distinguished best by details seen only with the help of a magnifying glass, let's use a glass on them, by all means. A pocket lens is not necessarily the badge of an absent-minded botanist. It is necessary to ferret out good characters of distinction. To find them is all that is needed. After all, man does not make trees; he uses them as he finds them and ultimately masters them.

A third suggestion is: Do not be unduly troubled by names. The question of botanical names is a serious one, indeed, and it will take time before it can be solved to the satisfaction of everybody concerned. However, it matters little if somebody understands as *Tilia vulgaris* the species that somebody else calls *Tilia europaea* so long as it is understood that these names apply to the same kind of tree. I am reasonably assured, for instance, that *Tilia vulgaris* is wrong, and I am ready to admit that *Tilia rubra* sooner or later may be replaced by *Tilia begoniifolia* or by some other name. I know, meanwhile, that so far as tree matches tree, *Tilia vulgaris*, or whatever it may be called, is definitely not the same as *Tilia rubra*, and this is all that truly matters. I shall follow in my articles the names used by Bailey's *Cyclopedia of Horticulture*, edition 1917, because these names are known to the majority of my readers.

The lindens which to my knowl-

edge are consistently found in cultivation may be divided into three groups, as follows:

1. European lindens: *Tilia platyphyllos*, *Tilia cordata*, *Tilia vulgaris*, *Tilia rubra*, *Tilia euchlora*, *Tilia tomentosa*, *Tilia petiolaris*.
2. Asiatic lindens: *Tilia amurensis*, *Tilia japonica*, *Tilia mongolica*, *Tilia tuan*.
3. American lindens: *Tilia americana*, *Tilia neglecta*, *Tilia heterophylla*.

To the list must be added two hybrids (a) *Tilia spectabilis*, the parents of which are *Tilia tomentosa* and *Tilia americana*; (b) *Tilia flaccida* (1), which is the offspring of *Tilia platyphyllos* with *Tilia americana*.

Of these lindens, the European are the most widely used in ornamental planting, and it is not likely that their supremacy will be challenged. The American lindens are inferior, on the whole, even to their hybrids with the transatlantic species. The Asiatic stock is being propagated by the trade without haste and does not hold the promise of some horticultural miracle, although we have barely scratched the surface of the possible importations from China. If, as it seems probable, some far eastern linden may in the future prove a match for the European favorites, nothing has yet been heard of it so far as the general public is concerned.

On the basis of the existing record of cultivated species and hybrids I venture to express the opinion that the hard lindens are not more than two, *Tilia rubra* and *Tilia spectabilis*. While it is true that certain forms of *Tilia tomentosa* can barely, if at all, be distinguished from certain forms of *Tilia mandshurica* and that *Tilia japonica* may pertinently be described as only a sad-looking *Tilia cordata*, the problem of such determinations is seldom going to trouble the professional nurseryman or the tree lover. Nor will the very difficult identification of *Tilia heterophylla* and *Tilia neglecta* force itself with much weight upon the horticulturist. On account of its prevalence in cultivation and of its being nearly always

unrecognized as distinct from other lindens, *Tilia rubra* is the stumbling-block. Only at a distance does *Tilia spectabilis* trail *Tilia rubra* as the next hard linden.

Thus, when all is said and done, lindens must be acknowledged as a group of plants that is not especially difficult to handle from the standpoint of the identification of nearly all its species. To make identification easier, the descriptions that will follow will stress the differences and the resemblances of the various kinds, beginning with those that are most frequently cultivated. Descriptions of this nature cannot conform to the usual pattern. Almost everyone who is familiar with horticultural and botanical descriptions has had the experience of reading long accounts that, somehow, fail to convey a live picture.

What seems to be needed most are pointers that can help in working out summer and winter identifications and outlines of essential characters for each species. To help matters, as it has already been noted, the reader should take pains to see as many lindens as he can. Words always mean something to those who have already familiarized themselves with nature.

TREE WOUND DRESSINGS.

While a considerable variety of tree wound dressing materials have been used, none has completely met the requirements desired. The substance sought for is one which will prevent rot and at the same time promote healing of the wound. The combination is not easy to meet, because the margin of safety between the strength of chemical which will kill microbe organisms and that which will not injure growing tissue is small. Paints or paint-containing materials, which are generally used, are weak as disinfectants. Combinations of them with certain standard fungicides have been promising. Coal tar products, such as creosote oil, mixed with asphalt, are probably the favored tree wound dressing materials at present.

In the spring of 1933 an experimental plot was laid out near Wooster, O., by the Ohio agricultural experiment station, the work being paid for in part by a grant from the American Society of Arborists. Wounds made on healthy trees of seven different kinds were given five different

treatments. The rate of healing was observed one year later and again three and one-half years later, to observe the progress made in healing of the wounds on the different trees and under the different dressings. The project was started by Dr. Curtis May, formerly of the station, and report on it was made in a recent bulletin by H. C. Young and Paul E. Tilford, of the station staff.

It was pointed out that some rot developed after each treatment in some of the trees. Better materials are desired, from the standpoint of rot prevention, for treating wounds on oak, poplar, elm and maple. Bordeaux paint, prepared by mixing dry Bordeaux powder with linseed oil, to which were added chemicals to impart a darker color, actually caused injury and did not prevent rot.

Asphalt paint, it was concluded, is the most desirable tree wound dressing of those used in the experiment, since less rot appeared under this treatment and the rate of healing was increased. Apparently it is to some extent a growth-stimulating substance. In some instances on poplar and oak it caused warty growths on the healing surface that might be objectionable if they enlarge further. Since certain coal tar products are known to produce tumors and cancers in some animals, this effect of asphalt paint on trees is of additional interest.

STATE COMPETITION

(Concluded from page 2.)

eries, offering stock for half the price of that quoted in the lowest bid submitted by the nurserymen.

The laws establishing government nurseries have been, for the most part, loosely drawn. They should be changed by an amendment providing that the stock so produced is to be used only for the purpose indicated by the legislation and not offered for sale. Further protection might be obtained by the insertion in legislation authorizing projects for which nursery stock is to be purchased, that bids be accepted only from commercial nurseries.

Instances such as that described in Maryland are too common to be passed by as unimportant. Local organizations of nurserymen should press the matter in their respective states, just as the national association is acting upon it with federal agencies.

(1) *Tilia flaccida* is not given in Bailey's *Cyclopaedia* and is apparently seldom listed by the textbooks. I have found it cultivated in several places in New York and Massachusetts. Rehder calls it *Tilia carlsruhensis* in the *Manual of Cultivated Trees and Shrubs*, p. 614, 1927.

California Memorial Plan

Nurserymen of Golden State Propose Honoring Pioneers in Fruit Breeding in the State by Voluntary Contribution on Trees of Their Varieties Sold Annually

After lying dormant for two decades, one of the objectives of the Nurserymen's Bud Selection Association of California was revived this year. At the meeting of the California Association of Nurserymen in September, William T. Kirkman, Jr., chairman of the memorial committee, planned to honor the pioneers of that state in the production of new fruit varieties. In the absence of the guest of honor at the convention, formal presentation of a gold watch was made by Mr. Kirkman early in October to J. H. Peak at his home at Selma, Cal., originator of the Peak cling peach, one of the outstanding varieties in California peach orchards for a quarter century.

The plan is that the nurserymen of the state will voluntarily contribute to a memorial fund one cent for each tree purchased of them of varieties presented to horticulture by these pioneers without previous reward to them. Living originators who will benefit by this plan are Peak, Libbey, Giblin, Haus, Walton, Stuart, Halford, all for cling peach introductions bearing their names. Another is Millard Sharp, of Vacaville, for his plums—Becky Smith, Emily and Sharkey. It is now too late to honor such men as Sims, Guame, Johnson and Phillips for their peaches, Burbank for hybrid plums, Burton for his prune, Vrooman for the Franquett seedling of Felix Gillett's walnut importations, Thompson for the raisin and Hatch for the almond.

But the living benefactors of the California nursery industry will, according to the plan, be tendered at the end of each selling season the sum accumulated at the rate of one cent per tree for the successful variety each has introduced.

Such memorial donation was part of the program of the Nurserymen's Bud Selection Association of California organized nearly twenty years ago. The president, vice-president and secretary of that association—William T. Kirkman, Jr., J. E. Bergholdt and Max Crow—all past presidents of the California Association of Nurserymen, formulated the idea as

part of a far-reaching program. First the war, and later the depression, diverted the undertaking.

Since the plan to honor California's pioneers in fruit breeding, at the convention in September, the horticultural and orchard periodicals of the state have given the matter much publicity. Honoring the old-timers is but part of the proposal. According to Mr. Kirkman, the plan is simple, and he describes it as follows:

"Any amateur or trained plant breeder, orchardist or nurseryman may give his hopeful new variety widespread trial by cooperating with any nurseryman or number of nurserymen who will contract to operate under the plan, which is briefly this:

"A nurseryman who is convinced that the variety is hopeful will propagate trees of the variety for the breeder's or finder's own planting at cost of propagation, and will propagate and send out for trial elsewhere a few trees each to other commercial growers and experiment stations.

"Each new variety that can find a nurseryman who will do this trial sponsoring will be scientifically examined and recorded in a minute detail and given a name.

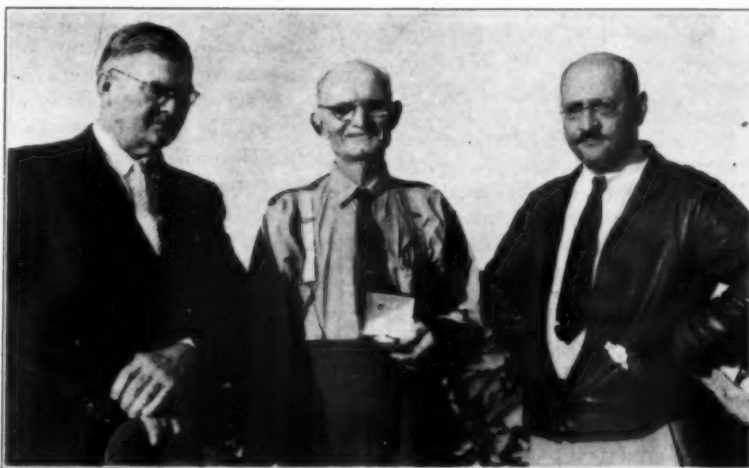
"To encourage quick commercial tryouts the nurseryman may at first propagate trees for sale to commercial growers at a nominal figure.

"All cooperating nurserymen may propagate and sell it without unusual price restrictions.

"If the variety has superiority enough to displace other varieties, it will in due time be demanded by planters, and cooperating nurserymen will be obligated to pay to the state department of agriculture or other agreed agency the sum of one cent per tree for every tree sold of the variety each season until the demise of the originator, and to refrain from supplying any trees or bud wood of the variety to other nurserymen without proof that the buyer has obligated himself and his successors to abide by this plan during the lives of the originators of successful new commercial varieties.

"The annual payment to the originator is small, only one-tenth to one-twentieth of the usual increased price of a promoted or patented variety, but it all goes to the originator—there are no promotion expenses to be deducted. In the instance of the unusually meritorious Peak cling peach the income to Mr. Peak would, during the past twenty years, have averaged substantially more than \$1,000 per year.

"This effort to encourage plant breeding, watchfulness for bud sports and, much more important, the continuous search for better chance seed-



Presentation of Gold Watch to Originator of Peak Cling Peach.
(William T. Kirkman, Jr., J. H. Peak and Fred Roullard, Fresno County Agricultural Commissioner.)

ling varieties by the orchardists of the state is getting into motion 'on its own' so to speak, and it is not contemplated that its permanent success will be jeopardized by allowing any other ramifications of the original effort to become affiliated with it.

"Technical state or federal authorities will be appealed to in creating a bureau of correct classification and nomenclature. No membership dues nor expenses are contemplated.

"A document will be created covering the situation and will be submitted for the general approval and acceptance of nurserymen—and the only provision for contributions from them will be that they give back one cent per tree if and as John Doe's variety is demanded by the public."

DWARF FRUIT TREES.

Much interest has been shown by American orchardists in dwarf fruit trees recently, although their record has not been particularly promising in this country. Cold winters, drought, hot summers and uncertain culture have been adverse factors. Some years ago experiments at the New York state agricultural experiment station with the so-called Paradise and Doucin root stocks resulted in an unfavorable report because of the shallow-rooting of the trees, the tendency to blow over and break off and the general lack of adaptability to climatic conditions.

Some reason for revival of interest in these dwarfing stocks lies in the work of Dr. R. G. Hatton and his associates at the East Malling research station, in England. He observed that the dwarfing stocks were badly mixed and that there were several types of plants going under the name of Doucin and of Paradise. These he separated into pure lines, or clons.

He selected sixteen types of root stocks for the apple, propagated them and worked various varieties of apples upon them. He numbered these root stocks, putting the designation Malling before the number to identify them further. Some of the root stocks were extremely dwarfing, some slightly less dwarfing, some still less and some not dwarfing at all.

Preliminary trials have been made of these stocks in this country, and the problem now is to test them adequately in as many different sections as possible, to determine their performance under American conditions.

Lectures for Employees

Large Retail Nursery Firm Starts Weekly Series of Scientific Lectures for All Members of Staff

On the principle that no one can know too much about his business, nurserymen are taking advantage of the short courses at state colleges, some sending their employees as well, and each year sees a growing number of such opportunities. However, the number is not yet large, so that the advantages they offer are less widespread than is to be desired.

The Outpost Nurseries, Ridgefield, Conn., are living up to their reputation as a leading firm in this field by offering a lecture course to its employees. These lectures are being given by outstanding scientific workers, several from the state agricultural experiment station.

No doubt experiment stations in other states would supply staff members to lecture before similar meetings of employees, if the bigger nurseries elsewhere undertook something similar, and the employees would consequently be better informed and more intelligent workers.

Before planning the lectures, the Outpost Nurseries told their employees of the idea and asked how many would attend regularly and what they suggested for the program. The reaction was amazing, according to Maurice L. Condon, general manager, who comments: "We believe that even our truck drivers should have all the knowledge of plants that we can possibly give to them, and strangely enough, they are just as enthusiastic as any of our group. We have been amazed at the enthusiasm shown by our employees. They all seem hungry for more knowledge."

Starting November 18 and continuing for a period of eight weeks, the Outpost Nurseries are offering this series of scientific lectures to all of their employees. Everyone in the organization is invited and requested to be present, including stenographers and all office help, truck drivers, mechanics, foremen, subforemen, salesmen, department heads and executives. There will also be a number of invited guests, including estate owners, superintendents and park executives.

These lectures, sponsored by the

company, are being delivered by well known scientists and should prove of great value in helping to bring everyone more up to date on new developments in the plant world. The lectures scheduled follow:

November 18—"Souls," by Dr. M. F. Morgan, of the Connecticut agricultural experiment station.

November 23—"Plant Physiology," by Dr. Carl G. Deuber, of Yale University.

December 2—"Fertilizers," by Dr. Herbert A. Lunt, of the Connecticut agricultural experiment station.

December 9—"Hormones," by Dr. A. E. Hitchcock, of Boyce Thompson Institute for Plant Research.

December 16—"Plant Pathology," by Dr. Allan McCallan, of Boyce Thompson Institute for Plant Research.

December 30—"Plant Entomology," by Dr. Roger B. Friend, of the Connecticut agricultural experiment station.

January 6—"Dendrology," by J. H. Beale, dendrologist of Boyce Thompson arboretum.

January 13—"Sales and Service," by speaker to be selected.

According to Richard E. Conley, president of the Outpost Nurseries, these lectures should serve a purpose similar to those of the medical profession, whereby well known medical men who have accomplished something outstanding in their professional field give a paper on that subject to an assembled group of doctors, and only by the getting together of these scientists can one keep up to date on new developments.

Each lecture will take about an hour. The meetings will then be thrown open to questions and discussion for one hour. The employees are asked to make notes in advance on any question they may have in mind on each particular subject. Stenographers will be present and will take down not only each lecture, but also all questions and answers, which will later be printed in bulletin form and distributed to employees.

A great deal of enthusiasm has been evidenced by the Outpost staff, and everyone seems very enthusiastic over this lecture course.

THE per capita consumption of apples decreased from sixty-six pounds in 1921-25 to fifty-nine pounds in 1931-35, but the consumption of oranges increased from twenty-two to thirty-three pounds in the same period.

Social Security Exemption Widened

Definition of Agricultural Labor under Act Broadened to Cover Greenhouse Workers by Legal Opinion and by Bureau Ruling on Vegetable Growers

Since publication of the text of the ruling of the internal revenue bureau exempting nursery field employees from the provisions of the social security act as agricultural labor, further rulings and opinions indicate more clearly the scope of exemption and possibly its widening.

The text published, it will be recalled, included commercial flower growers as well as nurserymen, because of their similar activities. Because of the emphasis on the words "on a farm" in the ruling, some doubt was left as to the extent of the exemption. Just as commercial flower growers in some cases grow their crops in greenhouses, so do many nurserymen conduct part of their propagating operations under glass. Therefore the legal opinion drawn up by Donald R. Richberg, attorney at Washington, D. C., for the Society of American Florists, construing greenhouse labor as agricultural under the social security act, will be of considerable interest. Mr. Richberg's opinion is as follows:

In the ruling by the Treasury Department identified as S. S. T. 203, published October 18, 1937, the previous rulings S. S. T. 72 and S. S. T. 73 were revoked and the term agricultural labor, as used in the social security act, was given a broader construction, so that certain employees of commercial flower growers were held to be exempt from the requirements of the social security act, which exempts agricultural labor. The ruling expressly stated that "the exemption depends upon the type of work the employee performs. In general services performed by employees in planting, cultivating, harvesting and preparing for market the products of the soil in doing individual tasks connected therewith constitute agricultural labor." It was further stated that services performed by an employee in the growing of flowers on a farm, of which the employer is the owner or tenant, constitute agricultural labor. The words "on a farm" cannot be taken in a narrow sense, and as they cover work in houses which are a part of large farm operations they also cover work in greenhouses, which are in themselves a small farming operation. This construction is emphasized by ruling S. S. T. 218, published November 15, 1937, specifically holding that services performed by an employee in the growing of vegetables constitute agricultural labor regardless of whether such vegetables are grown in open fields or in greenhouses. The same ruling obviously applies to the growing of flowers. It is, therefore, my opinion that employees of commercial flower growers, whether employed in open fields or in greenhouses, who are engaged

in planting, cultivating, harvesting and preparing for the market the products of the soil and doing incidental work connected therewith are engaged in agricultural labor as that term is used in the social security act.

The opinion rendered by Mr. Richberg as a practicing attorney is supported by the ruling published in the internal revenue bulletin of November 15 and known as S. S. T. 218 according to which "services performed by an employee in the growing of vegetables in greenhouses located on a farm of which the employer is owner or tenant constitute agricultural labor within the meaning of sections 811 (b)1 and 907 (b)1 of the social security act." The ruling states that services performed by an employee in the growing of vegetables on a farm constitute agricultural labor "irrespective of whether such vegetables are grown in open fields or in greenhouses."

Who Is Exempt?

According to an opinion expressed by members of the executive committee of the American Association of Nurserymen, "It would seem proper to assume that all of our employees who are engaged in growing, packing, or transporting our products would be exempt—would be considered agricultural. This would apply, of course, in the case of the original producer and where the work was performed on the farm. In many cases this would include all employees of a nurseryman excepting those engaged in office work, which are not considered as agricultural laborers in this recent decision, and must, therefore, come under the act."

In this connection it is interesting to note that November 15 the internal revenue bulletin published a ruling, S. S. T. 219, stating that services performed by employees on farms owned by a tobacco company "in connection with the growing, harvesting, drying, transporting, fermenting, grading and baling of cigar leaf wrapper tobacco grown on such farms constitute agricultural labor." In concluding the ruling it is stated: "Prior rulings which may at first appear to be in conflict with this conclusion are distin-

guishable. It was held in S. S. T. 103 services performed in the processing of sugar cane are not agricultural labor. That ruling is distinguishable on the grounds that such processing is regarded as a commercial operation and not incidental to ordinary farming operations within the meaning of the regulations. The same may be said of rice milling and cotton ginning (S. S. T. 142) and the crushing of grapes in the production of wine (S. S. T. 139)."

There are some nursery employees whose status is still doubtful, such as those engaged in landscape work. As they generally are not employed on a farm, they might not be considered exempt, but in some cases it might be held that they are delivering the produce of the nursery, and altogether it would seem that individual conditions would govern the ruling on this point.

Another question is the work done by owners or officers of a nursery, since they are employees if the nursery is incorporated. Those occupied with growing operations might be considered as exempt as engaged in agricultural labor, while those concerned with office and sales management would not be so held. These points will be taken up by the contact committee of the A. A. N. with the internal revenue officials, so that a uniform interpretation may be arrived at. In the meantime it is thought best not to seek individual interpretations.

Refunds of Tax Paid.

Nurserymen who have paid taxes on labor now ruled exempt will wish to obtain credits or refunds. For this purpose a special refund blank, known as form number 843, should be obtained from the collector of internal revenue to whom the tax was paid. It is suggested that, for the present, claims for refunds be deferred until further information on the above questionable points is obtained. This will make it easier for nurserymen to obtain refunds and promote uniformity in the claims made by members of the trade.

In filing the refund blank, properly

filled in, it should be accompanied by detailed information. Victor H. Self, acting chief, social security tax unit, states: "In order to determine the extent to which such claim for credit or refund may be allowed, it is suggested that in each case the nurseryman involved present a comprehensive statement showing the nature and extent of all activities engaged in by him, the specific services performed by his employees, the extent and location of the places where the services are rendered, and any other information which may be of value in determining whether services performed by employees of the nurseryman constitute agricultural labor within the meaning of title VIII of the act."

States which have unemployment insurance laws apparently are following the rulings of the federal authorities, so that nurserymen will be exempt from payment of state taxes for such employees as may be considered agricultural labor. In some states exemption has already been granted.

QUARANTINE CHANGE.

The threat of increased imports of nursery stock in consequence of lessened restrictions under quarantine 37, as told in the November 15 issue of the *American Nurseryman*, has awakened some trade organizations to action. Doubtless the topic will be one for discussion at the numerous meetings of nurserymen this month and next.

While entertaining full respect for the position of the authorities at Washington engaged in the enforcement of the plant quarantine act, nurserymen generally are of the opinion that change should not be made in the regulations now in force, certainly not without a conference or hearing of those who will be affected.

A parallel case is found in this country's protective tariff. Many economists are of the opinion that international free trade is preferable. But the industries of this country and the high standards of living of American workingmen have been achieved by means of the protective tariff. However desirable international free trade may be, the damage of a change to the industry and the workingmen of the country makes it undesirable, even by those who oppose a protective tariff in principle.

Commercial horticulture in this country owes its present size and position to the development of its own resources largely since the plant quarantine act and the regulations under it were promulgated. Another interpretation of the law may be correct in principle, but a change is certainly undesirable, in view of the damage which may be done to the horticultural interests of the country and to the many persons who derive their livelihood from it.

The California Association of Nurserymen is circulating copies of resolutions adopted by a unanimous vote at its last convention, "opposed to any modifications in the present regulatory quarantine measures governing the entry into this country of narcissus and other bulbs, as well as other classes of nursery stock, because apprehensive of the possible introduction of plant diseases and injurious insects damaging to the economic and ornamental horticulture of this country." The resolutions further urged "that in case modifications affecting bulbs and other classes of nursery stock quarantines are promulgated by one group or another, no action be considered unless preceded by a conference of growers, dealers and horticulturists, to be called by the federal horticultural board in Washington at some future date."

Other organizations have issued similar protests, and the matter is one that has of late received much attention by the executive committee of



Eugene S. Boerner.

AMERICAN NURSERYMAN

the American Association of Nurserymen, particularly in its meeting at Washington this week.

EUGENE S. BOERNER.

Succeeding the late Dr. Jean Nicolas in charge of research work for the Jackson & Perkins Co., Newark, N. Y., Eugene S. Boerner has been engaged in commercial horticulture all his life. He started in the nursery of the Cedar Hedge Farm Association, Cedarburg, Wis., operated by A. F. Boerner.

After spending three years in the rose range of J. F. Wilcox & Sons, Council Bluffs, Ia., growing the old-time favorites, Richmond, My Maryland and Killarney, he took the course in floriculture and ornamental horticulture at the University of Illinois, graduating in 1917 with a degree of bachelor of science. During the war he was a flyer in the air service.

Then he worked in a rose range in Texas and returned to Wisconsin preparatory to joining the staff of Jackson & Perkins Co. After spending a number of years in the greenhouses and nursery, he joined the sales staff, but always continued with keen enjoyment the work of selecting and putting into propagation novelties of all types. He joined in the formation of the new corporation upon the retirement of George Perkins.

When the late Dr. Nicolas joined the organization, Mr. Boerner worked in close cooperation with him. He will now dissociate himself entirely from the sales work and devote all his time and energy to carrying on the rose research so ably executed by Dr. Nicolas, together with the perennial work which he has been carrying on the past years.

READERS' suggestions as to material they would like to see in these pages are most welcome. And other readers can help supply it. One says he has been much interested in the articles on display grounds in larger nurseries and would like to see something about a smaller layout to meet the needs of the nurseryman who uses his home yard as a display garden, in connection with the nursery surrounding it. Photographs and descriptive notes of your place, if it is one of these, will be welcomed by the editor.

Planning the Catalogue

Pointers for Nurserymen in Preparing Their Catalogues for Next Season to Increase Sales-making Power and Pleasing Appearance

Many nurserymen issue no catalogue at all or issue catalogues of such character that they often defeat the purpose for which they are intended. Often so much emphasis is put on economy that the result is a catalogue neither representative of the firm that issues it nor of the merchandise which it is supposed to show.

However, many nurserymen realize the importance and the sales value of a good catalogue, and most of the leaders in the trade consider it in the light of an important investment in good merchandising. A good catalogue is important for many reasons:

It represents you when you are not on the buyer's premises. With nothing but your catalogue to influence a prospective purchaser, the catalogue must truly represent the character of your enterprise.

It represents your merchandise when the customer is in the mood to buy and has the time to consider the material he desires. If your catalogue does a selling job, you get that order; otherwise another nursery may secure it.

It tells the customer about your line and should sell materials with which he is unacquainted. Ample information about your organization and its products will encourage purchases from you in preference to a competitor about whom the customer knows little or nothing.

In planning a catalogue, it is well to remember that its main function is to act in the privacy of your customer's office or home as your combined sales representative and display grounds.

Plan to invest enough in it to make it a worthy representative of your nursery. Remember that it will be in competition with the catalogues and the salesmen of other nurseries.

Consider it as an important sales force that not merely shows your stock, but sells it. A shoddy catalogue does just the opposite of what you want it to do and creates a poor impression of you, your nursery and your stock.

Plan it and purchase it with more care than you give to the employment

of a salesman to call on your best customers.

Bearing in mind the purpose for which your catalogue is intended, it is well to consider these important suggestions:

Show your pictures as large as you can. Tiny cuts that make it hard to determine the appearance of your stock are a detriment. Even if large pictures take a few more pages, your catalogue is supposed to help sell your stock.

Be sure your descriptions are thorough and complete. You know your stock, but the chances are that your prospect or customer, even though he may have purchased a variety of items from you, does not know your full collection of plant material. Make your descriptions complete. It is not necessary to write a long story about each item, but give the facts—the facts will help you get that order. You know the sizes, the colors, the uses, the approximate shipping weights and the rest of the details so thoroughly that it is an old story to you, but it is new to the prospect who reads your catalogue; so put everything in for his benefit.

You have some specialty or take some extra care in certain phases of your work that differentiate your nursery from other nurseries. Take the time and space to enlarge upon these special features and their relation to your whole line of plant materials, and the catalogue will make sales for you.

Finally, when the catalogue is organized and the descriptions have been written, check the whole thing over once more. Put yourself in the place of the buyer. Ask yourself the questions about the nursery and about individual items that the buyer will ask; then see that each and every one of those questions is answered clearly and concisely in the catalogue. Do not make the buyer guess about something you are selling, because, instead of guessing, he might order from another catalogue.

What size will your catalogue be? How many pages will it contain? How many colors are necessary properly to display your stock? Will it

have an extra cover of heavier paper? Those are questions for you to decide.

The size and character of your catalogue will depend upon the frequency of its issue and the number of items to be shown. Keep in mind the fact that it is not necessary to show everything you carry. Select the best items, those in which you specialize and for which there is the greatest demand. If there is any doubt in your mind about the salability of some of the items you are growing, omit them. It is better to leave out the doubtful items than to crowd the catalogue with items for which there is little or no demand and that are not included among your specialties.

Concentrate on the items in which you specialize and in whose salability you have confidence. Show them in illustrations as large as you can and make those illustrations from really good photographs.

Shall the catalogue be loose-leaf, wire stitched or of some other type? Some individuals consider loose-leaf catalogues seriously with the idea of keeping them up-to-date by the insertion of new leaves, but unless such catalogues are kept up-to-date they are useless, and there is no way that you can be sure that the catalogue in your customer's hands is up-to-date. It is better to issue a new bound catalogue at regular intervals and be certain that your customer has the proper information.

If you are planning a catalogue, call on a printing concern that specializes in your particular field. The printer can point out an effective way to prepare your catalogue, to get the maximum effectiveness at the most reasonable cost. The printer's experience with the type of catalogue you should have can save you time and money and make your catalogue successful.

WHEN plants are selected for their intrinsic beauty, there will be more general use of such wild plants as the milkweeds, boltonias, rudbeckias, goldenrods, cassias, phloxes, sunflowers and yuccas.

Browning of Conifers

Brown Needles on Conifers in Autumn Result from a Variety of Causes—By Malcolm A. McKenzie

Brown needles present on coniferous trees in the fall are not always evidence of a diseased condition of the trees. At this season, all conifers show some dying of needles and often this is a natural condition. Frequently, persons who have expressed anxiety for the welfare of their conifers this year may be assured, after an examination of the trees, that little or no permanent injury is associated with the occurrence of the brown needles.

Deciduous conifers—that is, cone-bearing trees such as larch, which lose all needles annually—normally turn completely brown in the fall. Evergreen conifers, cone-bearing trees which retain most of their green needles throughout the winter, lose their older needles and sometimes also some needles of the current season's growth. At the present time, however, evergreens throughout New England are showing considerable discoloration which is associated, at least in part, with a weakened condition of the trees resulting from environmental conditions. In a few cases ornamental trees are seriously affected and may die. The doomed trees are the ones that suffered most heavily from so-called winter injury last year. The winter was not severe in its effect upon trees in general, but the evaporation requirements placed upon the evergreens were heavy. In November, 1936, after a fall of infrequent rains, the surface of the ground was frozen. During the remainder of winter, some frost was present in the ground and the drainage of water to tree roots in the soil was necessarily limited. Some evergreens injured by lack of water in the fall and winter showed ill effects early in the spring. Other evergreens did not show serious effects until the summer or fall and still others may not show the ultimate effects until the buds formed during the past summer develop in the spring of 1938.

Contribution No. 288 of the Massachusetts agricultural experiment station. Condensed from a paper presented by the writer, pathologist in shade tree disease control at Massachusetts State College, at the annual meeting of the Maine Arborists' Association, at Augusta, November 6, 1937.

In many instances, evergreens made rather good growth during the past spring and early summer owing to favorable weather conditions during these seasons. Sometimes the growth was so profuse that the trees could not support it and the result has been a dying of the tips of new growth in addition to a natural dying of the older needles on the same branches. The effect produced in these cases is an area of green needles hemmed in by died-back needles of the current year at the branch tips and backed up by older dead needles which have browned from natural causes.

Discoloration of evergreen foliage also may be caused by fungous diseases, insect infestations, poisonous chemicals in the soil or atmosphere, lack of proper nutrients in the soil, changes in the water level, careless removal or replacement of the soil for any reason, mechanical wounding, etc., but injuries from these sources are manifested throughout all seasons and are not peculiar to fall browning. Likewise, weight of snow on evergreen branches, and increase of branch weight resulting from rain on soft growth in early summer, may cause dying of foliage on the individual branches affected, but such dying is always initiated in the appropriate seasons, although it may not be observed immediately.

Probably the best clue as to whether the browning of evergreens in the fall is a natural condition of a healthy tree, associated with winter injury, or a result of excessive summer growth followed by limited weakening, is to be found from an examination of the buds which are already formed at this season of the year for next spring's growth. Plentiful, firm, green or juicy buds indicate a healthy tree, whereas a scarcity of recently formed buds or the presence of buds with colorless tissue or buds which pulverize easily upon rubbing between the fingers indicates weakened or injured trees. For the most part the browning of evergreen foliage this fall, investigated by the writer in response to numerous re-

quests, has not been of a type that will cause permanent injury to the trees.

LIST TWENTY NEW APPLES.

Twenty new varieties of apples and two new crab apples are on the list of recommended fruits published by the New York State Fruit Testing Association in its 1937-38 catalogue and are approved for trial by fruit specialists at the experiment station at Geneva.

These varieties either originated on the grounds of the experiment station or have been tested in the station orchards for a sufficient length of time to convince the fruit specialists that they possess characteristics that make them worthy of trial. The fruit testing association coöperates closely with the experiment station in propagating planting stocks of the station's new fruits and of new sorts originating elsewhere, but recommended for trial by the station specialists.

While the McIntosh and Delicious types of apples are now finding great favor, yet all of the varieties of these two types have important faults, do not cover the apple season and do not serve all purposes, declare the station specialists in explaining why their apple breeding program stresses the development of new McIntosh and Delicious types especially.

Probably the most promising new McIntosh apple since the introduction of Cortland by the experiment station some years ago is the Kendall. It has attracted more attention from fruit growers than any other new apple because of its fine quality, attractive appearance and promise of a variety that might possibly replace Baldwin. Other promising McIntosh types are Early McIntosh, Macoun, Milton, Ogden, Sweet McIntosh and two Canadian varieties, Lobo and Melba. Among the new Delicious types are Medina, Newfane, Orleans and Sweet Delicious, while other new varieties included on the list are Carlton, Crimson Beauty, Lodi, Red Duchess, Red Gravenstein, Red Sauce and Red Spy, and Dolgo and Young America, crab apples.

THE leaves of the common pineapple yield a strong, fine fiber that in the Philippines and elsewhere in the tropics is made into a fabric of great delicacy and beauty known as pina, or pineapple cloth.

Native Plants of Garden Value

Twenty-first in Series of Articles on Neglected Opportunities for Nurserymen in Native Plant Material—By C. W. Wood

Senecio is one of the largest genera of plants, numbering more than 1,200 species and inhabiting in some form every continent, I believe. As would be expected in so large a group of such cosmopolitan distribution, we find that the genus has varied immensely as it has encountered the wide range of growing conditions in the different parts of the world. Our native species are mostly, if not all, herbs, few of which are known to gardeners, the neglect being traceable, perhaps, to the spreading habits of some which have been recommended as garden plants. I do not know how many species have been described from North America, but the number is quite large and would supply a plant for almost every situation in the garden. I shall not attempt to enumerate all the good garden kinds of American origin, omitting the well known species, such as the golden ragwort, *Senecio aureus*, and others of its kind.

Of the lesser known natives, *S. Fendleri* is about the best species for rock garden planting that I have grown. It is an alpine form from Colorado and Utah, growing two or three inches high, mostly with deeply pinnatifid leaves, which are covered with tufts of wool-like hairs. The flowering period apparently varies, lasting over two months, commencing in June, in its mountain home, the floras tell us; here in northern Michigan I have considered myself well repaid when the blooming period covered the month of June. Like the flowers of many *senecios*, its heads are yellow. It is a quite easily handled alpine, requiring about the average amount of moisture and sun, or the shade of a rock at noonday if sufficient moisture is not present. It is probably not the best of the small native groundsels, but it has headed the list which has been grown here.

Such kinds as *S. Harboursi*, a small, white, woolly plant from high peaks in Colorado; *S. Porteri* from the same regions, except that it is said to climb even higher, and *S. alpicola*, from the highest mountains of Montana, where it attains a height of little more than an inch, producing its lemon yellow

flowers during July, and more than a hundred others await the enterprise of some enthusiast to make them known to American gardeners. The immediate monetary reward would not be likely to compensate for the work one would have to put forth in such a task, but so long as we all have to see immediate returns, just so long will American horticulture lag behind.

Shortia.

Our native *shortia*, *S. galacifolia*, is in many ways one of the most interesting of natives. Its local distribution in a few stations in the Appalachian mountains has been the subject of speculation among naturalists since the plant's range has been known. It is another instance of a genus with representatives in eastern North America and Japan with no known intermediate stations—a fact that has long interested botanists. Perhaps the most interesting feature in our present plant is its method, or rather lack of method, of seed dispersal. The researches of Malcolm N. Ross, of Arden, N. C., which were outlined in the September, 1935, issue of the *Journal of the New York Botanical Garden*, show that the seeds germinate in the seedhead while still attached to the ovary. Ross found that these germinating seeds, if carefully removed and placed on a good growing medium, lived and grew, while ungerminated seeds did not germinate if they were removed and planted in soil. That holds a hint for growers who are interested in this rare native, not so much for the propagation of commercial stocks, which may be accomplished much easier by means of division, as for the breeding of improved forms. And it is evident from the variation in collected plants, which include pink-flowered as well as semi-double forms in addition to the typical pearly white, that the species holds possibilities of improvement.

The plant, as it behaves for me, is generally about six inches high when in flower, the glossy round leaves being all basal and the bell-like flowers, about an inch across, coming singly on long peduncles. It is not apparent

that the plant requires an acid soil, but I have found that it makes its best growth in such a medium. It needs shade, I am sure, and a soil filled with humus, as in a rhododendron bed. Here is a plant of great possibilities for the careful grower.

Sidalcea.

In *sidalcea* we have a strictly American genus which has had to be sent abroad for improvement. Starting with plants like *S. candida* and *S. malvæflora*, skilled European gardeners have added to size of flower and raceme as well as to range of color. It has long been a puzzle to me to find a reason for the neglect in their native home of this splendid group of plants, and I have at last come to the conclusion that, aside from our apathy when our own plants are concerned, eastern gardeners are usually disappointed in their first efforts to grow them. I am not well acquainted with the genus in its natural habitats, but the improved forms, which I have had from England, where they seem to have reached their peak, require more moisture than our eastern climate provides. Give them a soil rich in barnyard manure or other form of decayed humus and a good mulch before the advent of dry, hot weather and they will normally give an excellent performance. Perhaps they will never attain the popularity they have in the more equable climate of England, where they cut a large figure as a cut flower and as a border plant, but I am sure that the right handling of the better named varieties will show that they deserve the care needed to secure superfine results. It would be useless to take space for an enumeration of the named varieties which now dominate the market in Europe, for few, if any, of them are available in this country. It will, however, well repay some one to make these plants available to American gardeners.

Silene.

Few *silenes*, or catchflies, are popular nursery plants, not because there is little good garden material among them, but rather that so many of the

really good ones are hard to transplant. The latter is especially true of that group of western Americans, of which *S. californica*, *S. Hookeri* and *S. laciniata* are brilliant examples. Speaking from my own point of view, I think that I should go to more pains to grow the three plants named than almost any other set of rock garden plants if I were gardening strictly for my own pleasure. And they do take care, too, for they are not reliably hardy in northern Michigan, and I usually lose them during an extremely cold winter. Then, too, they are not easy to transplant, owing to their long taproots and the softness of their leaves. Commercially they could be grown in pots to overcome the latter complaint, and their tenderness to cold could be conquered by careful mulching in all except the coldest sections.

Silene californica is perhaps the loveliest of the three, although it is hard for me to choose between it and *S. Hookeri*. The former's inch-wide, scarlet flowers are deeply cut and borne profusely on 8-inch to 10-inch stems. It is, I believe, best in full sun, while *S. Hookeri* seems to prefer light shade. The latter grows in little detached tufts of foliage, over which shine pink flowers on 6-inch stems. The color is supposed to be quite constantly a soft pink, but I have had not a little variation in seedlings, and it is said to be known in a red form. *S. laciniata* is beautiful in its near-red flowers, but it is quite impossible in this climate, and I doubt if it would be hardy north of the gulf states. Rather a newcomer to me in this group is *S. Ingramii*. It is on the order of *S. Hookeri*, with enormous flowers of a deeper pink. It also appears to be more amenable to garden ways and longer-lived. All desire a deep soil, well drained with stone chips and not too lean, though animal manure and chemical fertilizers are not to their liking. It has been my experience that a common scree soil to which slightly more than the average amount of leaf mold has been added makes an ideal rooting medium for these westerners.

In the east we have at least three catchflies, *S. pennsylvanica*, *S. virginica* and *S. Wherryi*, that deserve more attention. The last, being a rather new plant, has not had time to accumulate the hearsay reputation of being hard to manage, which the other two have undeservedly acquired. The gar-

den name of peat pink, which some searcher for a common name for all plants has attached to *S. pennsylvanica*, has evidently spread the impression that the plant is an acid lover. It may be all of that in a natural state, but some of my best plants have been grown in soil fit for lime-loving legumes; so acidity can hardly be necessary for its well-being. I have seen splendid specimens in sun and in shade, in rich soil and lean, until I have come to the conclusion that it will do well in any well drained situation after it becomes established. And its brilliant display of pink during part of May and June is worth working for.

The fire pink, *S. virginica*, grows naturally in open woods, but seems to adjust itself to almost any situation in the garden, provided the soil has good drainage. With me, it has, however, had a longer blooming period in part shade and in a soil full of leaf mold. At its best that blooming period is a long one, lasting from June into August, and a brilliant one, with an unbroken succession of fiery scarlet flowers. The last of the list, *S. Wherryi*, shows a close relationship to *S. pennsylvanica*, but it is an even better garden plant than the latter, being easier satisfied, and its flowers are larger. It is also more floriferous, being simply smothered under a canopy of deep salmon pink flowers during the usual blooming time of its better known relative. It appears to have a rather local distribution among the limestone hills of Kentucky, but it does well in Michigan in any well drained spot not too dry. In fact all the silenes mentioned in these notes are better for some irrigation during long dry periods. They may all be easily grown from seeds, and the eastern species, at least, may also be grown from cuttings rubbed off with a heel as soon as new growths have been made after flowering.

TRUE PINK HARDY ASTER.

The aster Harrington's Pink is the only true pink aster which has appeared at the field station at Waltham, Mass., since the organized study of the genus was begun in 1932, states Ray M. Koon, in the latest issue of *Horticulture*. During this period, nearly 300 species and varieties have been observed and not until this summer has one been found which could be technically classified as pink. The

color of this aster matches the deep rose-pink of Ridgway's color standards.

Plants of this variety set out at Waltham the last week in May grew to a height of only two and one-half feet, but it may be expected that any *novæ-angliæ* will reach four feet if given a month in which to develop.

The aster Harrington's Pink is the result of years of painstaking effort on the part of the late Millard Harrington, Williamsburg, Ia., a farmer whose special hobby was the growing of the New England aster. His method of improving was that of out-and-out selection of desirable types rather than by controlled pollination. He discarded rigorously and practiced segregation of the seedlings which he particularly wished to retain for their outstanding qualities. As his motive was not commercial, it is not difficult to understand why the beauty of Harrington's Pink has remained somewhat obscure since its origination.

Growing among Barr's Pink, Lil Fardel and Gerald Perry, Harrington's Pink robs them of the standing and importance they have merited for many years.

As is now common knowledge, this has been an upset season for some of the so-called short-day plants, notably asters and outdoor chrysanthemums. What has happened is that the delayed flowering season has greatly benefited the asters and nearly robbed the chrysanthemums of opportunity to flower at all.

This year, the asters at Waltham not only opened their flowers some three weeks late, but were able to maintain their showiness for perhaps ten days longer than is usual. Of course, such conditions are not to be taken as normal. Consequently, the seasons of bloom must be based on several years of observation and not on the unusual flowering season just finishing.

Then, too, the disaster which has overcome the outdoor chrysanthemums this year is clearly abnormal—an abnormality which it is hoped will not reduce interest in a genus of great garden value. So, this is a reminder that, looked at over periods of years, the showy periods are middle September for the asters and early October for the chrysanthemums. Thus, these two groups should be thought of as complementing each other rather than as being in competition.



Charlie Chestnut



Offers to Go to Washington

As nobody has come right out yet to offer to go to D. C. in Washington to be the representative for the nurserymen, I have been thinking I might take the job as I understand they are thinking of having a expense acct. and will pay wages too. If they would not be too strict on the expense acct. I would work for nothing, except of course what I could save on the expenses.

I have an old buddy in the war who is a janitor at a govt building and I have written to him to see about if he could spare me a place to stay where he lives. He says he works nights mostly so I could just as well have his bed at night, providing I would get out by 7 a.m. On account of I am always up at 5 a.m. at home to feed the horses at the nursery I wouldn't have no trouble to be out on the job calling on the different senators by 6:45 a.m. or 7 a.m. at the latest. I always say it pays to be on the job early on account of the early bird don't have to eat any worms as the saying goes.

Another thing which my buddy says he can help me on getting into buildings and right into the different rooms where the senators is. He says he could lend me one of his uniforms which he says will get me into any building on account of the people will think I work there. He says he might fix it to get me a job on the elevator where the senators meet so I could buttonhole the senators when they was on the elevator and they would have to listen to what I have got to say for the nurserymen.

If I get the job all the different nurserymen should take up there complaints with me and I would take it up with the senators. For instance supposing I get a letter from a nurseryman in So. Dak. as follows: Washington Rep. Washington D.C. Gents: I am a nurseryman in So. Dak. trying to make a honest living and here is what I am up against which I claim aint right and I sure am expecting you to take it up with the senators. My neighbor on the next farm has a razberry patch which he picks berries and sells a few at the store. Now I aint complaining about that you un-

derstand but when I seen him selling razberry canes to another farmer not once but twice I seen him, I claim its time to take it up at Wash. D.C. with the senators. He aint no nurseryman no more than I am a russian general and he aint got no right to interfere with the nursery business. Now I sent three dollars to the Washington D.C. fund and I want action and no foolin. Yours truly etc.

Now this is the kind of service I would give to the different nurserymen. First I would go to work and find out who is a senator from So. Dak. There is secret ways of finding this out. Then I would get a disguise and sneak up on him and I would lay bare the facts. First I would check up and find when the senator is up for election, then if he did not do nothing I would threaten to have the nurserymen vote against him in So. Dak. which would sure catch him in a vital spot as the sayin is. Furthermore if he dont snap right into it I would threaten to go over his head and take it up with his boss F. D. Roosevelt. Of course he would hate to have me go over his head and this would probably bring him around so that the nurserymen in So. Dak. wouldnt have no more trouble with his razberrys.

I figure there would have to be a item for miscellaneous on the expense acct so if I took a couple of senators to the movies or bought them a cigar it wouldnt come out of my own pocket. If it comes to a point where I have to buy some suppers for some senators, my buddys wife says she can get the church circle to put on a supper for 50c each per person which would be a big saving as my buddy says the meals run as high as a dollar at some of the hotels.

Another thing I have in mind is a list from all the different nurserymen of different stuff in their nurseries which I could use to give to the senators to plant on there farms back home. Anything that aint moving so I could give a bonus to a senator which is doing right by the nurserymen. I could make up a collection of say as follows: 1 pieplant, 6 asparagus, 2 mulberrys and one snowball,

which I could give to each senator so they would vote on the different stuff like I tell them.

I understand there is a nurseryman or two who has got his eye on this job, but I am the first to come out and give all the planks of my platform, so the different nurserymen will know what they are going to get for there money. I should sure appreciate it if the nurserymen will speak a good word for me when it comes up at the convention.

A. A. N. MEMBERSHIP.

The roster of members of the American Association of Nurserymen is still growing rapidly, as last month Secretary Charles Sizemore reported thirty-four new members over the month before. The total membership he reports as 450 members, and twenty-six additional applications were being considered.

ANTIFREEZE KILLS TREES

The practice of sanding slippery roads in winter is more generally followed each year by those who maintain our highways. For that purpose piles of antifreeze mixture are dumped alongside the highways for use later when they are covered with ice. These mixtures are presumably sand to which enough common salt or calcium chloride has been added to prevent the material from freezing during the cold weather. The menace of such piles to near-by trees is not sufficiently recognized. The leaching salt may injure trees at some distance if the drainage is in their direction. Valuable trees along our roadsides may be saved if more care is exercised as to the places in which such material is piled.

WINDBREAKS on at least two sides of a farmyard not only break the wind and stop drifting snow, but save fuel for the farmhouse. Tests by the forest service show that winter air is 2 to 6 degrees warmer on the leeward side of a windbreak and that a house unprotected by trees may use two to three times as much heat when winds blow at twenty miles an hour or more. The distance to which a windbreak gives protection increases with wind velocity and may extend to fifteen or twenty times the height of the trees.

State Competition

*Bid from State Nursery at Half the Lowest Figures
Quoted by Dozen Commercial Firms Brings Protest*

November 18 we had the pleasure of having one of our bids on plant material publicly read, together with the bids of twelve other legitimate nurserymen and dealers, in the state procurement division of the United States Treasury Department, Baltimore, Md.

In competition with these thirteen bids, another bid was read which was submitted by the Maryland state department of forestry. Surely this organization could not be classed with the nurserymen and dealers of the trade.

The bid in question was one of the usual procurement division invitations, calling for various items of plant material. One may submit bids on any of the items he can furnish. It so happened in this instance that the state forestry department bid on only one item in competition with the other thirteen bids submitted by the nurserymen and dealers of the trade. A close study of these thirteen bids would indicate conscientious thought given to establishing the prices, depending undoubtedly on the bidders' supply of the material and the shipping distance to the point of delivery. These thirteen bids seem to reveal a healthy, keen competition among firms which operate on funds provided individually through business earnings, private sources, financial backing or what not.

As a clashing note, the bid of the state forestry nursery was little more than half the lowest figure submitted by the nurserymen—a figure which surely must be lower than the cost of production!

The important point arises that, regardless even of the ridiculous price quoted, it is unfair to legitimate nurserymen for a state-owned nursery, operating on taxpayers' money, to compete with private business. This defeats the purpose of the state forest nursery, which, according to the common concept, is operated for the purpose of reforestation, which is admittedly absolutely necessary, and to provide this need in such manner as to encourage private reforestation within the means of all. This and probably

other equally worthy features are undoubtedly worth while to the commonweal.

State nurseries contend that they do not enter into competition with the nursery trade, but surely the foregoing is conclusive proof that they are in competition and actually take unfair advantage of the private nurserymen by unloading stock in the open market at prices which the nurserymen cannot produce it for. This has been the protest of nurserymen in state and national associations for a number of years.

This protest is expressed without hostile animosity, because it cannot be denied that the original purpose of the state nurseries is of unquestionable benefit to the land. But when they overstep their purpose and enter into the fields of commerce to compete with the private nurserymen, they should be called to task.

The Westminster Nurseries,
J. E. Stoner, Prop.

TREE SHELTERS CROP AID.

The need for sheltering tree belts for crop lands is stressed in a report of the South Dakota state planning board and the United States forest service, which has been given considerable newspaper circulation through a United Press dispatch.

Long-time farm planning should have as its goal five to eight acres of trees to each quarter section of South Dakota farm land, according to Frank I. Rockwell, extension forester.

This would mean an average of at least one acre of trees to every thirty-two acres of crop land. The present average is one acre of trees to 200 acres of crop land.

Listing the benefits to be derived from such a tree belt, he said:

"A tree belt would check the wind velocity and moisture evaporation over an area equal to ten to twenty-five times the height of the trees, and at the same time the blowing away of the fertile topsoil would be checked for similar distances. Crops would be protected from blowing and hot winds, thereby increasing yields."

Local conditions, Mr. Rockwell said, must determine how much of the farm area may profitably be devoted to windbreak protection. "In the corn belt, for example," he said, "approximately five per cent of the area can be used for trees without actually reducing farm yields."

ORCHARD FERTILIZING.

Evidence accumulated in experiments carried on during the past twelve years under modern methods of experimentation and with several standard varieties of apples on a number of soil types common to the region has convinced horticulturists at the New York state experiment station, at Geneva, that there is little need for any material change in the "nitrogen only" program of orchard fertilization as commonly practiced by fruit growers today.

This conclusion and evidence supporting the views of the experiment station specialists are set forth in a new bulletin just published by the station under the title of "Potash and Phosphorus in Relation to Organic Matter in New York Orchards" by

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APPLE - MAHALEB AND MAZZARD CHERRY - MYROBALAN PLUM

BARTLETT, SEROTINA AND USSURIENSIS PEAR

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KANSAS-GROWN APPLE - NATIVE PLUM - QUINCE STOCKS

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MOUNT ARBOR NURSERIES

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Shenandoah, Iowa

"One of America's Foremost Nurseries"

Prof. R. C. Collison. A copy of the bulletin may be obtained upon request to the station.

"Many statements and reported results of demonstration or experiment apparently indicating an inadequacy of the so-called 'nitrogen only' program of orchard fertilization make it both interesting and important to re-examine the situation as regards potash and phosphorus in New York apple orchards," says Professor Collison. He then cites early experiments carried on at the station in which no yield response to any fertilizer treatment was obtained under a system of clean cultivation, while later experiments under sod or partial sod conditions showed significant response to nitrogen.

The later experiments verify this early work, says Professor Collison, in that they show no response to potash or phosphorus application. Data are available which show that cover crops may supply phosphorus equivalent to 100 pounds of superphosphate per acre and potash equivalent to 200 pounds of muriate of potash. It is pointed out, however, that any let-down in orchard soil management which imperils an adequate supply of organic matter in the soil may introduce a potash and phosphorus problem. Fruit growers should be on the alert for any indication of a shortage of these elements, concludes Professor Collison, but in his opinion there is no need for undue alarm at this time.

EASTERN COUNCIL MEETS.

[Special report by telegraph.]

The Council of Eastern Nurserymen met at the Hotel New Yorker, New York city, December 1, to consider the plan of organization submitted to members of the component associations several months ago. It was decided not to form one chapter of the American Association of Nurserymen, but to strengthen the present organization in order to increase membership in the eight associations whose delegates form the council. Dues will be revised to give proportional representation in accordance with the number of members in each of the associations. To stimulate interest, the secretary will be sent to local association meetings and a monthly bulletin may be issued. Thirty persons attended the meeting. The officers were reelected.

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Complete Nursery Supply

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JUNIPER WEBWORM.

The juniper webworm is one of the most injurious insects attacking *Juniperus communis*. It has been observed on *Juniperus communis depressa*, *depressa aurea*, *hibernica* and *suecica*.

Its presence is made known by webbed and brown foliage, first appearing on the terminal shoots. The winter is passed as partly grown larvæ within the webbed foliage. Pupation occurs in May; the adults emerge ten to twenty days later and lay their eggs, which hatch from early to late June. The larvæ soon form their webs and remain active till cold weather.

Arsenate of lead, two pounds to fifty gallons of water, has given the best control. Applied at approximately monthly intervals from July 1 to October 1 and from March 1 to May, it has given an average kill of 97.2 per cent.

ROADSIDES

THE FRONT YARD
OF THE NATION

By J. M. Bennett

Superintendent of Parks and Forestry
Board of County Road Commissioners,
Wayne County, Mich.

Beautification of highways by the planting of trees and shrubs has been immensely stimulated by government appropriations for relief projects in recent years. Such work deserves the support of everyone interested in horticulture for its own merit and for the interest it engenders in the motoring public in such plant materials for private landscape use. Here is a book explaining what is being done and how. You should keep posted yourself and be ready to help your community in such projects.

\$3.00 per copy

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Coming Events

MINNESOTA PROGRAM.

The annual meeting of the Minnesota State Nurserymen's Association will be held December 13 and 14 at the Hotel Lowry, St. Paul.

In addition to an energetic and skillful secretary, W. T. Cowperthwaite, who has prepared an excellent program, the association has a president who is an equally capable publicity man, and R. D. Underwood has sent out one of his inimitable mimeographed bulletins carrying six pages about the event and the speakers. Those listed are Chet G. Marshall, vice-president of the A. A. N.; Dr. A. G. Ruggles, state entomologist; T. L. Aamodt, state nursery inspector; Dr. W. H. Alderman, head of the horticultural department of the University of Minnesota; Harley Deema, Charles City, Ia.; George F. Will, Bismarck, N. D.; John K. Andrews, vice-president of the association; Prof. A. P. French, of Massachusetts Agricultural College, known for his work on inspection and identification of fruit tree varieties in the nursery; Harold S. Welch, president of the Iowa State Nurserymen's Association; Hubert S. Nelson, Glen View, Ill.; F. R. Kilner, editor of the American Nurseryman; W. L. Kaufman, superintendent of parks, St. Paul; Ralph S. Lake, Shenandoah, Ia.; T. A. Torgeson, Saskatchewan, Canada; E. C. Hilborn, past president of the A. A. N.; B. J. Loss, past president of the M. S. N. A., and H. N. Dybvig, Colton, S. D., who will tell more about the famous shelterbelt project.

WESTERN PROGRAM.

The program has just been announced for the forty-eighth annual meeting of the Western Association of Nurserymen, to be held at the Hotel Muehlebach, Kansas City, Mo., January 4 to 6.

January 4 will be held a retail nurserymen's meeting, with E. H. Smith, York, Neb., as chairman.

The morning session January 5 will be devoted to association business, including the address of President C. C. Smith, Charles City, Ia., and the report of Secretary-treasurer George W. Holsinger, Kansas City, Kan. The afternoon program carries three important addresses by national leaders. Chet G. Marshall, Arlington, Neb., vice-president of the American Association of Nurserymen, will speak on "Legislation Relative to Government Competition." Paul Stark, Louisiana, Mo., a past president of the A. A. N., will speak on "Tax Legislation as It Applies to the Nursery Industry." Edward L. Baker, Fort Worth, Tex., A. A. N. president, will address the convention on "American Association of Nurserymen—Its Future Form and Objective."

In the evening will occur a special social meeting at 9:30, at which the speaker will be Tom Collins, of the Kansas City Journal Post.

For the final session, Thursday morning, January 6, are scheduled three speakers, and it will conclude with committee reports, election of officers and other final business of the convention. The speakers for this session are Dr.

L. C. Heckert, professor of chemistry and chemical engineering at Pittsburg Teachers College, Pittsburg, Kan., on "Chemistry and Horticulture"; Olaf Soward, Kansas City, Kan., on "Advertising," and R. I. Throckmorton, agronomist at Kansas State College, Manhattan, on "Rejuvenation of Nursery Soils."

The meetings of the Missouri and Kansas state associations will be held in conjunction with this convention.

At the request of several members of the association, the program committee has made arrangements for a display room adjoining the convention room for those who wish to exhibit nursery stock. A charge of \$5 is made for space, and reservations should be made with the secretary.

MISSOURI GROUP TO MEET.

William A. Weber, St. Louis, Mo., secretary-treasurer of the Missouri State Nurserymen's Association, has announced that the next annual meeting of the association will be held the evening of January 5, at the Hotel President, Kansas City, Mo. This meeting will be held in conjunction with the convention of the Western Association of Nurserymen.

NEW JERSEY MEETING.

The New Jersey Association of Nurserymen will hold its annual winter meeting at Trenton, January 25 and 26, at the Hotel Hildebrecht.

This 2-day meeting is being held during farm show week as one of the many agricultural meetings at that time.

The program is planned this year from the standpoint of round-table discussions of the nurserymen's problems and will include various phases of retail sales. These discussions will be headed by some of the leading nurserymen in the state, and conclusions of a constructive type will follow the discussion of each subject.

The program committee is F. D. Osman, chairman; R. Leach, William P. Howe, Jr., and Charles Hess.

IOWA STATE MEETING.

The Iowa State Nurserymen's Association will hold its annual meeting at Ames, January 19 and 20, 1938.

In connection with the meeting there will be a nurserymen's short course conducted by the horticultural department of Iowa State College. A fine short course is being arranged with prominent speakers, and a large attendance is expected, according to C. C. Smith, secretary of the association.

WESTERN PENNSYLVANIA.

Election of officers for the coming year will be held at the regular monthly meeting of the Western Pennsylvania Nurserymen's Association, December 10, at 8 p. m., at the Fort Pitt hotel, Pittsburgh.

CINCINNATI ELECTIONS.

The annual election of officers for 1938 of the Cincinnati Landscape Association will be held at Cincinnati, O., Monday, December 6. Peter Cassinelli, Glendale, is president, and Edward A. Smith, Cincinnati, has been secretary since the association's founding eleven years ago.

The Greater Cincinnati Nurserymen's Association scheduled its annual election for Monday, November 22.

ILLINOIS PROGRAM PLANS.

Dr. August P. Beilmann, arboriculturist for the Missouri Botanical Garden at St. Louis, and Alfred C. Hottes, Des Moines, Ia., formerly associate editor of Better Homes and Gardens, will be two of the outstanding speakers on the program for the twenty-second annual convention of the Illinois State Nurserymen's Association, which will be held at the Hotel LaSalle in Chicago January 11 to 13.

Dr. Beilmann is to discuss, in an illustrated lecture, the outstanding experimental work of the Missouri Botanical Garden in the feeding of shade trees and will tell not only of the results of that work, but also the recommendations as to fertilizers and dosages which have been developed as a result of these experiments. Mr. Hottes will speak on methods that nurserymen may use in-

We grow nothing but fruit trees. The trees we offer are all our own growing, a half million of them.

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Fruit, Shade, Flowering Ornamental Trees, Fruit-tree Seedlings, Roses, Etc.
Very complete line of quality stock

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creasing the sales appeal of their literature and advertising. There will also be a number of other speakers discussing subjects of especial concern to nurserymen at this time, including a lengthy discussion of the liability under the social security act and the Illinois occupation tax law.

This year the convention will occupy the LaSalle hotel's new convention suite on the mezzanine floor, a part of which has been completed since the meeting of the American Association of Nurserymen last July. This convention will again include an exhibit of nursery stock and supplies, a feature which has for long been a part of the Illinois convention.

KANSAS NURSERYMEN'S SCHOOL.

The department of horticulture of the Kansas State College, Manhattan, in conjunction with the Kansas Association of Nurserymen, has arranged a school for nurserymen, to be held at Manhattan December 3. The sessions will be held at room 33, Dickens Hall, on the college campus. The chairman of arrangements is Harold Crawford, Ottawa. The program is as follows:

DECEMBER 3, 9:30 A. M.

Call to order, with word of welcome, by R. J. Barnett, of the college department of horticulture.

Address, "Adapted Trees and Shrubs for Regions in Kansas," by Henry Gilbert, of the college extension service.

Address, "The Nurseryman's Library," by G. A. Filing, of the college department of horticulture.

Discussion of problems in the storage of dormant nursery stock, led by J. J. Pinney, of the Willis Nursery Co., Ottawa.

Address, "What Is Good Nursery Stock and Who is Responsible for Producing It?" by J. A. McClintock, of Purdue University, Lafayette, Ind.

Address, "Nursery Stock—Elements of Costs and Prices," by Ralph B. Ricklefs, of the Kansas Landscape & Nursery Co., Salina.

Luncheon at the college cafeteria. After lunch program, directed by the Horticultural Club of the Kansas State College, under William F. Pickett, of the department of horticulture.

DECEMBER 3, 1:30 P. M.

(President Ralph B. Ricklefs presiding.) Address, "Some Insect Pests of Nursery Stock and Newly Transplanted Trees," by George A. Dean, of the college department of entomology.

Illustrated lecture, "Landscape Design for Small Properties," by L. R. Quinlan, of the college landscape gardening division.

Address, "Some Root Stock Problems—Pomological Solutions," by J. A. McClintock.

Address, "Planting Time in Kansas," by S. W. Decker, of the college department of horticulture.

Address, "Major Climatic Factors Affecting Tree Growth in Kansas," by Lloyd F. Smith, state forester.

Tour of the college campus and city of Manhattan.

WESTERN NUT GROWERS MEET.

The twenty-third annual meeting of the Western Nut Growers' Association will be held December 9 and 10 in the Chamber of Commerce rooms at Newberg, Ore. E. S. Strother is in charge of local arrangements and John Trunk is in charge of exhibits. The officers are: President, W. G. Fellows, Gaston, Ore.; vice-president for Oregon, E. S. Strother, Newberg; vice-president for Washington, John Springer, Vancouver; secretary-treasurer, C. E. Schuster, Corvallis, Ore.

OHIO SHORT COURSE.

The usual short course offered by Ohio State University for nurserymen and landscape men is scheduled for January 18 and 19 at Columbus, O. The three main subjects at this course will be "Tree Moving and Maintenance," "Culture, Use and Selection of Junipers" and "Costs of Production and Landscape Maintenance."

Juniperus chinensis Pfitzeriana
(Pfitzer Juniper)

Kalmiopsis leachiana

Thuja orientalis aurea nana
(Berckmans' Golden Arbor-vitae)

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Burr's Forty Years.

C. R. Burr & Co., Manchester, Conn., celebrated their fortieth anniversary November 5. Salesmen from New England, New York and Pennsylvania met with the office force at Manchester, where a general get-together and banquet took place. The following day a complete tour of the nurseries was enjoyed by all. A photograph of the group is reproduced on this page.

To a meager acre of fruit trees, which formed the nucleus of this organization, more acres were added, until at this time over 600 acres are used for the growing of shrubs, fruit trees, evergreens, ornamental trees, perennials, etc., for the wholesale trade. At the beginning the product from the original acre under cultivation was sold to near-by dealers. Today, the output is shipped from coast to coast and from the Great lakes and Canada to the Gulf of Mexico.

This organization during its forty years has seen good times and hard times, but the indomitable spirit of C. R. Burr has carried on in the firm belief that all times cannot be good, neither can all times be bad, and by keeping the ship headed straight into the breakers and on an even keel, the losses that may accrue during the stormy intervals will be amply offset by the returns in the better years.

There are few organizations after forty years that have at the head the original founder. However, C. R. Burr is still president and one of the most active members of the company. Mr. Burr will be remembered by many as "Barberry Burr," due to his having for many years specialized in growing *Berberis Thunbergii*.

Following in the footsteps of his father, Charles S. Burr, now general manager, is carrying on in a manner that should guarantee a continued onward and upward movement of the organization.

George Harris, particularly well known in the east and by nurserymen throughout several states, will soon have been with the company for twenty years. While he is secretary and has certain farm and office duties to perform, much time is devoted to contacting the trade.

The salesmen, who are the very lifeblood of any business, have been with the firm through thick and thin. Among those to whom special tribute was paid were Bernard Oak, Erwin Whitham, Phil. Palmer and Leo Travis.

BEAUMONT CLUB SHOW.

Perhaps those who have taken part in a real flower show will be only the ones able to appreciate the undertaking recently sponsored by the Beaumont Florists' and Nurserymen's Club in staging at the south Texas state fair, Beaumont, Tex., one of the biggest flower and garden exhibitions ever shown in this area.

Heretofore, the showing of flowers and landscaping has been somewhat neglected by the fair association, but with the increasing interest of the public, inspired by the activities of the florists' and nurserymen's club and the garden clubs in this area, the fair association requested the Beaumont Florists' and Nurserymen's Club to sponsor and stage this garden show. One-fourth of the floor space of the exposition building



Staff of C. R. Burr & Co. Celebrates Fortieth Anniversary at Manchester, Conn.

was allotted for the purpose. The club members worked cooperatively in planning and installing this show.

The florists who made individual exhibits, on the left side of the exposition building and immediately beyond the garden exhibit, included the following: Park Flower Shop, Mrs. Planchard Flower Shop, Davis Flower Shop, Newman Florist, Johnson Florist and Murchinson Florist.

Immediately in the foreground was a well designed garden display arranged by the Griffing Nurseries, assisted by Winkler Landscape Service, with bedding plants furnished by Tyler's and Philip Newman.

This garden exhibit represented an informal arrangement. For the background was used the rich silver red cedar. In the group were foliated shrubs, including dwarf sweet viburnum and Griffing's compact eleagnus. To brighten up the corner groups, the new type of Formosa fire thorn was used. The center feature at the end of the garden was a pool properly set into the picture and brightened up with a few attractive rocks arranged informally about it. Rock plants were used about the pool and flowering water lilies were growing in it. A gazing globe marked the center feature at the end of the pool.

Featured in a display garden, perhaps for the first time, was shown Griffing's Sun-Shade grass. This grass was cut in solid form and laid over the entire area.

During the ten days of the show, more than 200,000 persons were in attendance and viewed the exhibition with interest and enthusiasm. The club feels elated over the way the show was received, and from all indications, it will be made an annual affair.

TEXAS NOTES.

Leonard M. Riggs, landscape architect with the R. Lacy Nursery, Longview, returned recently from a tour on which he obtained material for the coming season's landscaping needs. He announced that the season's offerings of coniferous and broad-leaved evergreens will excel anything that the Longview territory has known in the past. He mentioned specimen grafted hollies from Florida, hardy azaleas and yaupon, among other things.

The junior chamber of commerce of Houston is sponsoring a magnolia-planting campaign, and the announcement was recently made that nurserymen of that city are offering magnolias at cost in order to assist this worthy undertaking.

A recent inventory reveals that a nursery operated by the United States forest service near Plainview has 3,500,000 trees growing from plantings made last spring. A. S. Klein is the nurseryman in charge. After frost, some fifty or sixty men will be employed digging and heeling in, preparatory to planting in six panhandle counties, as part of the

Hardy Rosebushes

(Winter Harvested)

Write for Revised List
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ROSEBUSHES

VIGOROUS FIELD-GROWN
ROSES.

Low budded on Multiflora understock. Handled and graded with utmost care. Popular varieties. Three grades. **WRITE FOR LIST.**

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New Rose TEXAS CENTENNIAL

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Ask for color illustration
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DIXIE ROSE NURSERY
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ROSES

Hardy, 2-year, field-grown budded stock. Finest stock ever grown. **Write for List.**

Lang Rose Nurseries
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ROSES

Have 30,000 2-year Field-grown Texas Roses Budded on Multiflora. Will sell cheap.

Ask for list and prices.
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Complete assortment of lining-out sizes
Also larger grades for landscaping
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EVERGREEN SPECIALISTS

Largest Growers in America
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STOCK YOU WILL NEED

Cotoneaster Acutifolia, 18 to 24 ins.; 2 to 3 ft.
Cornus paniculata, 18 to 24 ins.; 2 to 3 ft.
Cornus alba, 2 to 3 ft.; 3 to 4 ft.
Rosa setigera, 18 to 24 ins.; 3 to 4 ft.
Rosa blanda, 18 to 24 ins.
Ribes alpinum, 15 to 18 ins.; 18 to 24 ins.
Rosa canadensis, 18 to 24 ins.; 2 to 3 ft.
Bellona populi, 3 to 6 ft.; 6 to 8 ft.
Ask for quotations

ESCHRICH'S NURSERY, Sta. F., Milwaukee, Wis.

Canterbury Boxwood

Buxus suffruticosa and B. sempervirens.
Selected uniform plants; bushy and foliated to center; masses of fibrous roots. Finished specimens from 4 inches up, ready for quick shipment. Prices lower, plants larger. Ask for special list.
CANTERBURY, Box A, Easton, Md.

prairie states forestry project. Seeds are being collected for next year's plantings. Among the trees being used are black walnut, black locust, pecan and ash. Black locust especially is said to have made remarkable growth this year.

The Dixie Rose Nursery, Tyler, has just completed a new brick building, at 613 Valentine street, on highway No. 31, leading north of Tyler. This building is adjacent to the railroads and within a few blocks of the business district. It is of modern design and beautifully finished inside and will be occupied by the firm's offices. Back of the building on the same lot is an immense packing house, where small orders are arranged for shipment. A. F. Watkins, manager, took an active part in the recent rose festival.

STOP FALSE ADVERTISING.

In a stipulation under the Federal Trade Commission, Edward R. and Juliana Von Castelberg, Harbor View, South Norwalk, Conn., trading as the Murvon Seed Co., and engaged in the sale of "Japanese rose seeds," will discontinue advertising that Japanese rosebushes will bloom in the winter, unless it is explained that this is the case only when in a warm climate or when the plants are cared for in a greenhouse.

The partnership has also agreed to stop representing that Japanese rosebushes, when 3 years old, will have 500 or 600 roses, or will have roses the year around. They admitted that such bushes do not produce 500 or 600 roses and that they will not, under ordinary conditions, bloom in the winter, according to the stipulation.

ADD ELM QUARANTINE AREAS.

New areas were added November 10 to the territory under quarantine on account of the Dutch elm disease. The regulated area was extended under an order by the Secretary of Agriculture because of discovery of new infections of elm trees in the newly quarantined areas. The movement from quarantined areas of elm trees, parts thereof, elm logs and elm lumber from which the bark has not been removed is restricted.

The amendment to the Dutch elm quarantine added to the regulated areas: Two towns in Connecticut, Redding and Weston in Fairfield county; the town of Cornwall, in Orange county, New York, and the township of Alexandria, in Hunterdon county, New Jersey.

PATENT PLANT PACKAGE.

A patent was issued November 2 to John Thompson Lovett, Jr., Little Silver, N. J., on a plant ball package and method of making the same. The description under the patent is as follows:

A plant ball package including a plant ball, a casing formed about the same, said casing consisting of a waterproof multiply sheet material that is creped longitudinally of the plant ball to facilitate the forming of the casing, securing cords tensioned around the casing, said casing being secured at the lower end thereof to the plant ball, and at its upper end substantially directly about the plant stem, and a restraining band of a flat sheet material wound around said casing intermediate of the ends thereof, said band being continuously adhesively joined to the casing, said band providing a relatively smooth outer surface of substantial area adapted to receive indicia respecting the plant ball.

A NEW building is being constructed at the Florida Landscape & Nursery Co. establishment, Leesburg, Fla. A garden and patio will be done in Spanish style.

SHADE TREES

	Per 10	Per 100
Ash, Am. White, 10 to 12 ft.	\$7.50	\$65.00
Ash, Am. White, 2 to 2 1/2-in. cal.	15.00	125.00
Catalpa Bungei, 5 to 6 ft.	7.50	65.00
Elm, American, 10 to 12 ft.	7.50	65.00
Elm, American, 1 1/2 to 2-in. cal.	9.00	85.00
Elm, American, 2 to 2 1/2-in. cal.	12.50	115.00
Flowering Crab, 2 to 4 ft.	4.00
(Eleyi, Floribunda, Hops, Sargentii)		
Japanese Cherry, 2 to 4 ft.	7.50	65.00
Japanese Cherry, 4 to 5 ft.	8.50	75.00
Jap. Weeping Cherry, 1-yr.		
5 to 6 ft.	13.50	125.00
Maple, Norway, 8 to 10 ft.	9.50	85.00
Maple, Norway, 10 to 12 ft.	11.00	100.00
Maple, Norway, 2 to 2 1/2-in. cal.	20.00	185.00
Oak Pin, 2 to 2 1/2-in. cal.	25.00
Oak Pin, 2 1/2 to 3-in. cal.	40.00
Plane, Oriental, 2 1/2 to 3-in. cal.	20.00
Poplar, Lombardy, 6 to 8 ft.	3.50	20.00
Poplar, Lombardy, 8 to 10 ft.	3.00	25.00
Poplar, Lombardy, 10 to 12 ft.	4.00	35.00

Write for prices on other varieties and sizes.

WAYNESBORO NURSERIES, INC.
Waynesboro, Virginia

APPLE TREES

We offer to the trade an extra-fine lot of 1-year Apple Trees; all grown from Whole Root Grafts. A complete list to select from. This stock is unusually vigorous and strong. Your customers will like these trees.

Send us your list of requirements for special fall booking prices.

E. W. Townsend Sons Nurseries
Wholesale Dept.
Salisbury, Maryland

LINING-OUT STOCK

Complete list of deciduous lining-out stock this year.

Place your order now for either Fall or Spring shipment, and avoid disappointment when wanted.

THOMAS B. MEEHAN CO.
Dresher, Pa.

LINING-OUT STOCK

Our complete catalogue is in your hands. Better get that order in before shortages appear.

HILL TOP NURSERIES.
Canstown, Ohio

HERBS

Pot-grown plants; over a hundred varieties.
Dried Herbs for Flavoring and Fragrance.
Other plants of unusual character and with the charm of old-time gardens.

Write for Catalogue
Weathered Oak Herb Farm, Inc.
BRADLEY HILLS, BETHESDA, MARYLAND

PEONIES

All types, including Tree Peonies
The Cottage Gardens
Lansing, Mich.

WINTER INJURY BY MICE.

Minnesota Offers Poison Permits.

One of the big problems confronting nurserymen and fruit growers in Minnesota and probably in other states also has been how to prevent winter injury to trees by mice. Hundreds of nursery trees are injured annually, and as hitherto the use of poison has not only been frowned upon, but actually barred from use, growers have had to beat the law or suffer untold loss. So many representations have been made to the division of game and fish conservation of the loss suffered by mice that the department has approved the use of poison for their control under certain conditions.

Mechanical protectors have been of some avail and trapping has had certain advantages, yet poisoning as a control measure can be highly effective, if properly carried out. The department says if poison must be relied upon, every precaution must be taken to see that the poison reaches the mice and that predatory animals and birds which prey upon field mice cannot obtain it. Permission to use poison must first be obtained from the director of the conservation department. Such permission will be granted to responsible nurserymen and orchardists, according to the discretion of the director. The permit specifies the kind of poison that may be used, also the time and manner of its use. Under this permit, only the poison sold or recommended for this specific purpose by the United States Department of Agriculture or by manufacturers using the same formula can be used. Permits must be renewed annually.

All poison placed for the control of field mice must be contained in a box or tube that allows the mice to enter, but excludes other small mammals and birds as far as possible.

One of the recommended bait traps is made of a piece of galvanized sheet iron, about ten inches long, shaped over a 1½-inch pipe and nailed to a wooden base. Other suitable poison boxes can be made from tin cans or from wood or metal with a small opening left for the mice. Placing these small tubes with the poison bait inside in the runways of the mice will prove effective, provide some protection for other animals and protect the bait from wind and rain. As an individual mouse may range over half an acre, it is obvious that in order for the method to be effective, it will be necessary to use several locations for the bait, preferably the mouse runways. Most injury from field mice occurs in early winter; therefore poisoning must be done early to be effective.

Natural control by the enemies of field mice, such as hawks, owls, weasels, skunks and foxes, is recognized, and nurserymen are urged not to destroy them, but to encourage their presence. Indiscriminate destruction by uninformed persons of these useful animals in past years has been a serious mistake, for which nurserymen, among others, now pay the penalty. L. S.

TREE SPECIES MOVING NORTH.

Recently, surveys of trees conducted by the Lake state forest experiment station have shown at least five species of trees have taken root many miles northward of previous surveys. The

hemlock is of particular interest, as it was once thought lost to Minnesota, but has now been discovered on the eastern side of Lake Mille Lacs. This is the westernmost locality known for the species in the United States. Obviously, this statement does not apply to imported specimens that may be seen in nurseries.

Other species which have extended their range in Minnesota generally to the north are rock elm, silver maple and red oak. The rock elm, which at the time of the last survey was found in northern Iowa, is now growing in the northern Itasca county, 300 miles north of its former range limit. The silver maple has moved northward 250 miles, from southern Minnesota to the lower Red Lake region.

Foresters say that a knowledge of the general distribution and movement is basic to the successful handling of forests. L. S.

STRAWBERRY REFRIGERATION.

The writer was informed recently by one of the largest growers of strawberries in the area about the Twin Cities that he plans to treat his late crop and hold the fruit for winter sale. In the winter months the prices asked by storekeepers in the Twin Cities for what amounts to fresh strawberries is almost unbelievably high.

Some of the larger coöperative berry-marketing associations plan to install equipment to take care of their fruit in 1938. Not only strawberries, but raspberries, have been used in a sort of 2-way experiment to improve the shipping quality during the regular season and to hold them for winter use.

At the banquet of the Minnesota State Horticultural Society in St. Paul

recently, frozen strawberries—fruit picked at least two months ago—were placed on the ice cream.

Apparently the most successful method of treating strawberries and raspberries in Minnesota is the one developed by the divisions of horticulture and plant physiology at University Farm. Crates of freshly picked fruits are placed in a gas-tight container, where they are exposed for several hours to a relatively high concentration of carbon dioxide gas. At the same time, the berries are cooled to about sixty degrees Fahrenheit. This treatment has been found to preserve the firmness and bright appearance much more satisfactorily than ordinary refrigeration.

Conditions may be different in Minnesota from those in some other states. Here some of the largest nurserymen are also the largest producers of small fruits. Consequently, an adaptation of any method of fruit preservation will mean considerably increased income for those men. L. S.

WILLIAM J. SMART returned last week from a six weeks' trip in the south for the D. Hill Nursery Co., Dundee, Ill., while L. L. Kumlien left for the east.

NEW HYBRID
CHINESE ELM

Leaves, large dark green. Growth, vase shape, rapid. Seeds are collected from a single specimen tree. Leaves on the parent tree remain rich green through the summer. Limited supply for immediate delivery. 18 to 24 ins., \$15.00. 2 to 3 ft., \$17.50. 3 to 4 ft., \$35.00 per 1000.

Chinese Elm, *Ulmus Pumila*

2-year transplants

4 to 5 ft. \$25.00 per 100
5 to 6 ft. 40.00 per 100

WOODS NURSERY CO.

715 N. E. 23rd St., Box 3021
OKLAHOMA CITY, OKLA.

SPECIAL 30 DAY SALE
of Lining-out
and Specimen Stock

Hardy and Rare Trees, Shrubs, Ferns,
Vines and Herbaceous Perennials
of the Blue Ridge Mountains.

Write for price list.

GARDENS OF THE BLUE RIDGE
E. C. Robbins

Ashford, McDowell Co., N. Car.

Asparagus Roots

We offer to the trade one of the largest plantings of 1 and 2-year roots in the east. Write us for prices.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

APPLE SEED

As a boy have you ever broken your knife trying to cut a stick from a Wood Apple tree (*Malus sylvestris*)? If you had you would know why you would not want to plant this apple for stock. Its wood is harder than iron.

Have you ever been fooled biting into a delicious-looking Cider Apple when you were over with the boys in France? If you had you would have had an unpleasant surprise and learned that these Apples are a strain different from our table varieties, and so they are, closely related to the Wood Apple, but with the softer wood of the Common Apple, a hybrid race between the two and as such apparently the most suitable strain for stock.

French Cider Apple seed, for fall delivery, 85c per lb.

F. W. SCHUMACHER, *Horticulturist*
Seeds for Nurserymen and Foresters
Jamaica Plain, Mass.

BUY
CHRISTMAS
TREES NOW

Norway Spruce

Balled and Burlapped	Per 1000
4000 2 to 2½ ft.	\$350.00
2000 2½ to 3 ft.	400.00
1000 3 to 4 ft.	450.00
Not Balled and Burlapped	
2 to 2½ ft.	300.00
2½ to 3 ft.	350.00
3 to 4 ft.	400.00

MALONEY BROS. NURSERY CO.
Danville, N. Y.

1887

1937

OUR GOLDEN ANNIVERSARY

We offer for Fall 1937 and Spring 1938 our usual line of

SHRUBS EVERGREENS
FOREST AND SHADE TREES
VINES AND CREEPERS
NATIVE PLANTS

Write for Fall Trade List now ready

FOREST NURSERY CO., INC.

J. R. Boyd, Pres. McMinnville, Tenn.

BARBERRY THUNBERGII SEEDLINGS

1-year

6000, 3 to 6 ins. 8000, 6 to 9 ins.

25,000 *Ampelopsis Veitchii*, 1-year seedlings

2,000 *Ampelopsis Veitchii*, 2-year transplants

Asparagus, Pedigreed Washington, 2-year

Hydrangea Pee Gee, 3 to 4 ft. and 4 to 5 ft.

T. B. WEST & SON

Maple Bend Nurseries Perry, Ohio

HARDY AZALEAS

Kaempferi, *Foukhanensis*, *Schlippenbachii*, *Mucronulata*, *Vaseyi*, *Calendulacea*.

Enkianthus, *Juniperus Rigida*, *Hick's Yew*, *Hex Bullata*, *Photinia*, *Honey Locust*, specimen *Mughos*, *Austrian* and *Limber Pines*, *Taxodium*, *Wisteria Multijuga*.

Fine variety of high-grade Nursery Stock.

Large Vews, 12 to 15-ft. spread.

Write for prices.

BRIMFIELD GARDEN NURSERY

245 Brimfield, St., Wethersfield, Conn.

PRIVET and BERBERIS Splendid Stock

Write for Special Quotations

LESTER C. LOVETT

Milford

Delaware

Ampelopsis Veitchii Forcing Roses Barberry Thunbergii

And Complete Line of Nursery Stock

C. R. BURR & COMPANY, Inc.

Dept. A—Manchester, Conn.

Twenty Million Strawberry Plants

Complete list of all the new varieties.

We furnish packing out service for nurserymen and seedsmen. Write for wholesale price list.

E. W. TOWNSEND SONS NURSERIES
Salisbury, Maryland

MEET AT MINNEAPOLIS.

The first of the winter series of meetings of the Twin Cities Nurserymen's Association was held November 15 at Wade's restaurant, Minneapolis, Minn. After a dinner, Harry F. Baker presided at the business session; the minutes were read by Secretary Vincent Bailey.

There was a lengthy discussion of the social security act and the new ruling regarding the exemption of nurserymen. The status of landscape gardeners who buy stock and, later, from their own planting ground, resell it and plant it for customers was questioned. It was decided to ask the American Association of Nurserymen if anything is known which will apply to landscape men who do not produce stock.

Another discussion took place on a situation which has arisen in a number of Minnesota towns affecting nurserymen who employ agents. It appears that authorities in some communities have passed ordinances prohibiting solicitation of any kind. T. A. Aamodt, who took charge of the meeting when President Baker had to leave, promised to get a ruling from the attorney-general of the state on what one member described as ordinances in restraint of trade.

Mr. Aamodt spoke of the annual meeting of the Minnesota State Horticultural Society and Louis F. Fischer, chairman of the program committee, talked on the program and the speakers for the session. W. T. Cowperthwaite, secretary of the Minnesota State Nurserymen's Association, gave the dates for the annual convention of the state organization as December 13 and 14; it will be at the Lowry hotel, St. Paul.

As the next session of the Twin Cities Nurserymen's Association will be the annual meeting when the election of officers will take place, the president named a nominating committee.

PROVIDES FOOD FOR BIRDS.

C. R. Burr & Co., Manchester, Conn., recently sent out the following announcement:

"Recently our attention has been called to the fact that *Rosa multiflora japonica* seedlings produce one of the finest foods for berry-eating birds. This plant is low-growing and loads to capacity with bright red berries that adhere to the branches as long as there are any left to be consumed. Because of its low-growing tendencies, all of the food can be readily reached.

"Bird sanctuaries, fish and game clubs, park commissioners and others interested in the welfare of our feathered friends are becoming acquainted with the food value of the *multiflora japonica* seedling and it is the opinion of those growing this material in a wholesale way that the demand is going to exceed the supply.

"Florists, landscape architects and dealers who have become acquainted with the various facts pertaining to the real value of this plant are contacting the clubs and organizations to which berries for birds hold a special appeal, and the results are nothing short of spectacular. It is safe to concede the point that any plant that is extremely hardy, withstands severe dry, wet or cold weather and continues to produce an abundance of food for birds has its place and will go far."

TAXUS CUSPIDATA CAPITATA

(Upright Japanese Yew)

Our knowledge of the manifest qualities of this evergreen prompts us to transmit a share of the high regard we hold for it. Decidedly the best "all purpose" evergreen in our huge nursery, it ranks as "America's Public Evergreen No. 1."

An interesting deep green, holding good color throughout the entire year; contrasts beautifully in arrangement with other evergreens; dignified and lovely as a specimen; excellent in foundation planting; hardy; not particular as to location; dense, compact and practical as a hedge; adaptable to any desired shearing.

The fibrous roots of our *Taxus* are a result of frequent root pruning, insuring a hundred per cent earth ball, with almost perfect transplanting success. Sizes for all planting conditions. Quotations on request.

BOBBINK & ATKINS

Rutherford, New Jersey

20,000 **ELMS**, American, Vase, Moline, up to 4 inches, transplanted.

4,000 **MAPLE**, Norway, up to 2 1/2 inches, transplanted.

2,000 **WILLOW**, Thurlow, 8 to 10 ft. and 10 to 12 ft.

10,000 **SPIRÆA**, Vanhouttei, 3 to 4 ft. and 4 to 5 ft.

Send for list on many other items.

C. M. HOBBS & SONS, Inc.

Bridgeport, Indiana

Largest Nursery in Indiana. Established 1875.

LINING-OUT STOCK

Connecticut Valley Grown

Seedlings - Rooted Cuttings Evergreen and Deciduous

Write for list

C. E. WILSON & CO., INC.
Manchester, Connecticut

PRINCETON NURSERIES of PRINCETON, N. J.

SUPERIOR Hardy Ornamentals



EVERGREENS

For Seventy years growers of Quality Evergreens Lining-out Stock a Specialty

Write for Trade List

EVERGREEN NURSERY CO.

Established 1864 1 STURGEON BAY, WIS.

LANDSCAPE SCHOOL.

Project Given Start.

The eagerly anticipated project for the training of landscape gardeners was given a start at a committee meeting November 2 in the Chamber of Commerce building in Los Angeles, Cal.

Lovell Swisher presided as acting chairman in the absence of Gilbert Scutt. Other members of the committee who were present were: G. W. Mackenzie, of the vocational department of the board of education; John P. Inglis, principal of Freemont high school and assistant supervisor of trade and industry of the Los Angeles school system; Joseph Pike, superintendent of school ground maintenance; William Beresford, superintendent of grounds of the Los Angeles Country Club; John B. Corcoran, superintendent of agriculture of the Los Angeles schools; Arthur Yale, of the National Youth Administration, and John Vosberg, teacher coordinator of landscape architecture.

After taking up routine business and formally electing John Vosberg as secretary of the committee, high lights of the plan were discussed. In addition to conducting two classes of two hours each a week for technical instruction, Mr. Vosberg will visit apprentices on their jobs and give them individual instruction. It was brought out at this point that it would be a part of the duties of the committee to find jobs for these students as apprentices, and for this purpose it was suggested that publicity be given this part of the plan so that employers might be informed of the manner in which they could cooperate.

It was recommended that at the meeting of the Southern California Horticultural Institute, to be held at the Mayfair hotel, Los Angeles, November 18, as many of the committee as possible should be present to explain the plan to the group assembled, since these meetings are well attended by the trade. It was suggested that garden clubs, private estates, cemetery associations and park superintendents should also be notified of the availability of these workers who are sufficiently interested in landscape gardening to put actively into practice what they are being taught.

It was brought out that interested labor in this field is difficult to procure, and much of it comes from other parts of the country, where methods they have learned are at variance with local conditions. For some unexplained reason, young Japanese men are not qualifying for this work as did the older generations, but are going into different fields of endeavor. This leaves a definite shortage of efficient gardeners in California, where beautifying gardens and landscapes, as one of the committeemen expressed it, "always has been and always will be one of the biggest businesses in the state." Entrance age was set at 16 years or over.

Practical Application of Principles.

It was further stated that more practical application of the principles of maintenance and landscape gardening was desirable than could be obtained in the colleges of agriculture. This, it develops, is the reason for making actual paid employment in this line of work, either part or full time (except for the attendance of classes), a com-

pulsory requirement in this course of instruction.

The plan is under the direct supervision of the board of education and is made possible by both federal and state appropriations. It is the opinion of its sponsors that it in no way conflicts with work done in colleges, but gives opportunity to capable young men to whom the college course is not possible. Neither does it conflict with the work of the National Youth Administration in this direction, but this group may supply material for the specialized training given in this course.

Headquarters in High School.

Office space has been arranged for in the Freemont High School building, 7676 South San Pedro street, where applicants may apply to John Vosberg. John P. Inglis, principal of the school, invited members of the committee to visit the school at any time.

It is expected that the beginning classes of ten to twenty student gardeners may shortly be increased, although careful selection will be made as to proper qualifications and adaptability for the work, since the object of the plan is to train men in the specialized needs of California horticulture.

Girls are not eligible to participate in the program. This subject came up with an application from a girl at the first meeting, but the question had been anticipated by the legislators when they made the document to read "male applicants."

CALIFORNIA LABOR RULING.

The status of nursery labor has been officially placed in the bulletin issued by Ben Nelson, chief deputy rules and regulations officer, department of employment, California unemployment reserves commission. In conformity with the federal ruling published in S. T. 203 (I. R. B. XVI-48-8990), reversing a prior opinion, the California unemployment reserves commission has deter-

mined that services performed by employees on a farm of which the employer is the owner or tenant in growing of nursery stock constitute "agricultural labor" within the meaning of section 7 (a) of the unemployment reserves act, as amended, effective November 1, 1937. Liability for contributions on employment under similar circumstances for nurserymen during prior portions of the year is not affected by the commission's determination of policy.

The same conclusions are applicable with respect to similar services performed by floriculturists or commercial flower growers. In general, services coming within the scope of the exception are those performed by employees in planting, cultivating, harvesting and preparing for the market the products of the soil and in doing incidental tasks connected therewith. Services performed by office workers or individuals employed in retail or wholesale establishments, who are concerned merely with the sale or disposal of nursery stock or flowers and who do not perform services in connection with the growing thereof, do not constitute "agricultural labor" within the meaning of section 7 (a).

SAN FRANCISCO NOTES.

At the meeting of the Southern California Horticultural Institute at the Mayfair hotel, November 18, John S. Vosburg, instructor-coordinator of the apprentice-training program for landscape gardening, explained the plan and its benefit to the trade. W. S. Rowlands, of Peck & Wadsworth, presented an instructive and entertaining scenario, "Going Places with Trees," showing the modern tree mover's high-powered transportation methods.

Armstrong Nurseries, Ontario, report the successful growing of Mayan pecans in the Yuma pecan district of California and believe this variety should thrive well over most of the state.

"Autumn Color" was the subject of the discussion at the meeting of the

WRITE FOR 10-DAY TRIAL OFFER on this High Pressure PARAGON SPRAYER



TEST it for yourself. Compare results with what you have been getting from your present sprayer. Use any spray solution or cold water paint. Spray your nursery stock, whitewash your greenhouses, barns and tool sheds, inside and out. Note how easily this Paragon delivers powerful uniform pressure at the nozzle with little effort at the pump handle. Passes through narrowest aisles without jamming at corners. Automatic agitator prevents solution from settling. We guarantee it never to clog while in use. Ten days trial costs you nothing if not satisfied. If your dealer does not sell the Paragon, mail the coupon today.



The
Campbell-Hausfeld
Company
1203 State Ave.
Harrison, Ohio

Send prices and details as per advertisement in American Nurseryman for December 1.

Name Post Office.....
Street State

PEACH TREES

Thrifty June-budded Stock

We offer to the trade an up-to-date list of the leading varieties to select from. All of these trees are grown on our farms in Maryland. They have shaped up nicely and have a well balanced fibrous root system—the kind of stock that will please you and your customers.

We invite your inquiry and offer special prices on early fall bookings.

E. W. Townsend Sons Nurseries
Wholesale Dept.
Salisbury, Maryland

ARONIA

12 to 16 ins. 16 to 20 ins.

**BRILLIANTISSIMA
ARBUTIFOLIA
MELANOCARPA**

2-year-old seedlings for lining out

Write for prices

HINSDALE NURSERIES, INC.
7200 S. Madison St., Hinsdale, Ill.

100,000 Apple and Pear scions in leading varieties. Also Apple and Pear grafts. 100 bus. large Peach Pits, \$2.00 per bu. Seeds: Sumac, Red Snowberry, Walnut, Hickory and Chestnuts.

WANTED: Lining-out evergreens and shrubs.
Egyptian Nursery & Landscape Co.
Farina, Ill.

WHOLESALE GROWERS

of a complete line of Nursery Stock including Fruit Tree Seedlings.

Lake's Shenandoah Nurseries
Shenandoah, Ia.

PEACH TREES

Peach Seed

Pin Oak Ilex Crenata
General Line Quality Ornamentals
HOWARD-HICKORY CO.
Hickory, N. C.

PEACH PITS

Our Pits Compare Favorably
With the Best

HOGANSVILLE NURSERIES
HOGANSVILLE, GEORGIA

CLARK GARDNER NURSERIES

Osage, Iowa

Originators of patented SEMI-POT-
TED PLANT AND BULB PACKAGE
for over-counter trade. Has WATER-
ING TUBE and other unique features.

California Horticultural Society November 15 at California Hall. Elsie Upmann, Palo Alto, director of the California School of Gardening, talked on the value of color and its effect upon the observers. In California she believes that native shrubs and trees should be used as much as possible. Walter B. Clarke, San Jose, confined his talk to woody plants and gave a list of trees and shrubs which will contribute fall color to the garden. He had brought from his nursery specimens of *Pyracantha formosana splendens*, var. Miller, with large berries; *Cotoneaster decora*; *Crataegus Carrierei*; *Viburnum Opulus*; *Osmanthus*, holly-leaved and aureus, and *Ginkgo variegata*.

OHIO TOWN PLANTS TREES.

Last month 16,000 Norway maples of 8 to 10-foot height were planted twenty to twenty-five feet apart along the streets of Struthers, O., as the result of the activities of a group of fifty women known as the Yellow Creek Garden Club. The cost of the trees was assumed by the individual property owners, whose agreement was won by a house to house canvass. The supervision of planting, application of fertilizer, wrapping of trunks and three inspections the first year for each tree are assumed by the club. The contract for the planting went to Robert Inglis, Youngstown, O., and the trees came from the Mark Welch Nurseries, at Painesville, O.

OBITUARY.

Harry Haas.

Harry Haas, 64 years old, owner of the Haas Home Nurseries, Terre Haute, Ind., was found dead in bed at his home November 19. His lifeless body was found by his wife, Mrs. Hannah L. Haas. He had died sometime during the night from a heart attack.

Mr. Haas was born July 28, 1873, in Vigo county, Ind., and resided there practically all of his life. He had been in the nursery business for the past thirty-five years, succeeding his father, who formerly operated the business. Mr. Haas suffered a severe heart attack in December, 1935, and following his recovery was pronounced in splendid health.

Besides the widow, he is survived by two sons, Paul and Carl Haas; one daughter, Margaret Haas; two brothers, Rudolph and Edward C. Haas, and two sisters, Mrs. W. L. Blucke and Mrs. H. C. Medcraft. Funeral services were held November 21, with burial in Roselawn Memorial Park.

INVENTION of a fuel for the purpose of protecting outdoor plants, trees, vegetables, flowers and other ground crops from frost is reported to have been made by W. L. Mulford, Los Angeles, Cal. This is burned on the ground without the use of pots, stoves or generators, and it is claimed that the ashes make an excellent fertilizer, also that the product is smudgeless, odorless and not injurious. If it proves commercially practical it should solve the smudging problem, as it ignites instantly, is nonexplosive, easy to handle waterproof and weatherproof, and can be made for much less than the cost of the fuel used at present.

STRAWBERRIES

Standard
and
Everbearing



From our large plantings, we are in position to fill your orders direct. Let us quote you.

We offer 50,000 Latham and 25,000 St. Regis Raspberries at a low price for immediate sale.

STAHELIN'S NURSERY Bridgman Mich.

SMALL FRUIT PLANTS

Evergreens — Shrubs
Lining-out Stock

Send for Complete Trade List

SCARFF'S NURSERIES
New Carlisle, O.

LATHAM RASPBERRIES
CHINESE ELM Hardy Strain
Northern Apple Seedlings
ANDREWS NURSERY
FARIBAULT, MINN.

Wholesale Growers of

Grapevines, Currants,
Gooseberries, Blackberries
and Raspberries

Let us quote on your requirements

FOSTER NURSERY COMPANY, INC.
69 Orchard St. Fredonia, N. Y.

Wholesale Growers of

SMALL FRUIT PLANTS

Leading varieties of Grapes, Asparagus,
Rhubarb, Currants, Berry Plants.

Fall price list now ready.

Krieger's Wholesale Nursery
Bridgman, Michigan

BLUEBERRIES

Six Varieties

2-year-old plants. 1-year-old rooted cuttings. Also cutting wood.

J. R. SPELMAN CO., Growers
South Haven, Mich.

LINING-OUT STOCK

Evergreen Seedlings, Transplants,
Maples, Nut and Apple Trees.

Write for fall price list.
Special reduced prices.

MATHEWS EGGERT NURSERY
North Muskegon, Michigan

WANTED TO BUY

Quantity of large fruit trees
2 to 3 inches in diameter

Prefer Apples, a few Pears, Prunes,
Plums and Sour Cherries.

ATWATER LANDSCAPE CO.
437 Front St., Jamestown, N. Y.

PENNSYLVANIA QUARANTINE.

Planting and transportation of several species of barberry bushes are prohibited in Pennsylvania under a quarantine effective November 1 established by J. Hansell French, secretary of agriculture. This step was taken to stem an alarming spread of black stem rust disease.

The quarantine order applies only to the common barberry and those other species which harbor the black stem rust of wheat, oats, barley, rye and many wild and cultivated grasses. Barberries act as host to the disease during one stage of its development.

Under the order, agents of the bureau of plant industry are authorized to destroy the outlawed plants or parts of plants wherever found in the state.

Species of the plant resistant to or not susceptible to the disease are exempt. There are thirty-one exempt species listed in the quarantine.

A federal quarantine prohibiting the interstate movement of barberries into Pennsylvania was established September 1.

WAIVE INTERSTATE FEE.

Commissioner Holton V. Noyes, of the New York state department of agriculture, announced November 17 that a reciprocal agreement between New York and Michigan waives the nonresident license fee charged New York state nurserymen by Michigan.

New York nurserymen must still file copies of their state inspection certificates with the Michigan department of agriculture and must also submit a list of their Michigan agents, each of whom pays a \$1 license fee after qualification through a written examination.

New York demands no license fees from either home or out-of-state nurserymen. All shipments, however, must be accompanied by a certificate of inspection.

It is believed that the waiver will be beneficial to nurserymen of both states, removing a barrier to easy commerce among the nurserymen of both commonwealths.

THE John Fiore Nursery Co., Lake Forest, Ill., has been incorporated by John Fiore, Mary Fiore and Mike Lomoro.

A BILL accepting in the name of the state of New Jersey a \$5,000 legacy from the estate of Charles Lathrop Pack, of Lakewood, for the establishment of a tree nursery was passed by both houses of the state legislature November 15. Expenditure of the legacy will be under direction of the state department of conservation.

CLASSIFIED ADVERTISING

Peonies: Tree and Herbaceous, best varieties. Oberlin Peony Gardens, Sinking Springs, Pa.

Forest tree and ornamental shrub seeds for sale. Home Nursery, Liberal, Mo.

Peonies, Irises, Poppies, Hemerocallis, you save at least 20 per cent, as I must move from leased ground. Send me your want list. **Thimlar Nurseries, Fort Wayne, Ind.**

Peach Seed, 50 bus. screened, Tennessee natural, running 7000 seeds to the bu. Write for prices. **Tennessee Nursery Co., Box 1, Cleveland, Tenn.**

Azalea Liners.

We will have approximately fifty thousand Azalea liners for February-March delivery. Place your order now.

Florida Nursery & Landscape Co., Leesburg, Fla.

CATALOGUES RECEIVED.

[In writing for a copy of any of the catalogues reviewed below, please mention that you saw it described in *The American Nurseryman*.]

Forest Nursery Co., McMinnville, Tenn.—Wholesale catalogue of nursery-grown and collected shrubs and trees, vines, lining-out stock and cuttings. The stock includes coniferous, broad-leaved evergreen and deciduous material. Fruit and nut trees are listed, and some stock is for reforestation and for plantings to control soil erosion.

Native Gardens of Eastern Washington, Spokane, Wash.—Illustrated descriptive folder of hardy western broad-leaved evergreens, with no prices mentioned. Also a mimeographed bulletin of rock garden plants and the aforementioned evergreen and other native shrubs, giving common names, botanical names, descriptions and prices. The lists include sixteen rockery plants and eight native Washington shrubs.

F. J. Grootendorst & Sons, Boskoop, Holland.—After several pages relating to tariffs and import permits, come lists of the various kinds of stock covering 151 pages, followed by a general index. The catalogue presents wholesale prices and the offers include ornamental stock, hardy fruits, roses, fruit trees and conifers among the nursery material, plus perennials and such bulbous stock as lilies and irises, decorative grasses and bamboo, aquatics and plants shipped from Belgium, the last-named embracing *Azalea indica*, bay trees, palms and begonia and gloxinia bulbs. *Rhododendrons* are offered in many varieties, as is delphinium.

Conard-Pyle Co., West Grove, Pa.—The October issue of "Success with Roses," combined with "Rose News," contains notes for rose fanciers, plus an illustrated retail price list of Star roses. Novelties and several rose collections are included. The illustrations are mostly in color. The booklet includes an obituary of the late Dr. J. H. Nicolas, who was connected with the Conard-Pyle Co. some years ago.

Overlook Nurseries, Crichton, Ala.—Pocket-size booklet of forty-six pages as the 1937-1938 wholesale price list of ornamental stock, with azaleas, camellias and gardenias stressed. Also listed are conifers, deciduous trees and shrubs, vines, palms, bamboo, Philippine lilies and amaryllises. There are illustrations and an index.

Herbert D. Pappas Nurseries, Claremont, N. H.—Folder as the 1938 wholesale price list of gladiolus bulbs and hybrid delphinium. Mention is made of a discount until New Year's. A separate folder describes the Pappas gladiolus trial gardens.

M. Herb, Naples, Italy.—Catalogue of vegetable and flower seeds, printed in English, German and French, though the actual printing was done at Naples. Among the novelties for 1938 are *Xanthisma texanum*, *Eidens Riccetti* and various primulas and sinias, besides several vegetables. Seeds of ornamental grasses and palms are also handled. Prices are quoted in Italian money.

T. G. Owen & Son, Inc., Columbus, Miss.—Fine pictures of the firm's plantings enliven the wholesale price list, a catalogue of eighteen large pages, succeeding the usual small booklet. The front shows a planting of evergreens, the back a map of the region about Columbus giving the distances to the principal cities. Offered are evergreens and some deciduous material, the greatest number being arbor-vitae and junipers. Included are azaleas, gardenias and magnolias. A center spread shows a winter view of the range, used for propagating, and photographs of Mrs. H. M. Owen, president, and her husband, general manager.

The Lester Rose Gardens, Watsonville, Cal.—Printed sheet offering seeds and plants of a scarlet red datura and a blue geranium. Also, mimeographed sheet giving wholesale prices for calla bulbs, campanula plants and seeds of California wild flowers.

Rosemont Nurseries, Tyler, Tex.—Primarily a rose catalogue, with many varieties illustrated in color, the booklet also offers a few evergreens, vines, irises and fruit stock. Among the roses are pictured a number of the patented kinds, some in collections.

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ROSE REGISTRATIONS.

The American Rose Society's registration committee has approved applications for registration of the following roses. Notice of these registrations has been sent to rose organizations in foreign countries and trade papers.

If no objections are raised before December 23, 1937, the registration of these names will become permanent as of that date.

Dorothy McGredy. Hybrid tea. Originated by Samuel McGredy & Son, Portadown, Northern Ireland, introduced by Jackson & Perkins Co., Newark, N. Y., and said to be a seedling of unknown parents. Flower is described as sunflower-yellow in color shading off to crushed strawberry on the outside, vermillion with saffron yellow base inside. It is of medium size, double, cupped form, blooming several together on medium-length stems and said to have a moderate, sweet fragrance. Plant is described as vigorous, with normal green foliage, resistant to disease, and blooming abundantly from May to November.

Snowbank. Polyantha. Originated by J. H. Nicolas, introduced by the Jackson & Perkins Co., Newark, N. Y., and said to be a seedling of Mrs. Erskine Pembroke Thom and Gloria Mundi. Flower is described as semidouble, of medium size, open form, and slightly fragrant. The color, snow-white. Plant is said to be of moderate growth, with normal green foliage, blooming from June to October.

Raffel's Pride. Hybrid tea. Originated by Frank C. Raffel, Port Stockton, Cal., and said to be a seedling of Tallisman. Flower is described as oriental red on inside of petals, gold splashed with red on outside, the red fading to pink and the gold to yellow with age. It is double, of medium size, open form, and of moderate fragrance, borne singly on long stems. Plant is said to be vigorous, with dark green foliage, blooming profusely from May to November.

John Square. Everblooming climber. Originated by John Square, Painesville, O. Said to be a sport of Souvenir de Claudius Pernet, with large, double flowers of cupped form and moderate fragrance. The color is sunflower-yellow, deeper near the base. Plant is described as making from six to eight feet of growth in one season, with dark green, disease-resistant foliage, and blooming abundantly in June and October. It is claimed to be harder than most climbing roses.

Mrs. Frank B. Stearns. Hybrid tea. Originated by M. H. Horvath, Mentor, O., and introduced by Melvin E. Wyant, Mentor, O. Said to be a seedling of Rosa setigera and Lady Alice Stanley. Flower is described as small, double and with slight fragrance, blooming in clusters on normal stems. Color is light rose-pink. Plant is described as two and one-half feet tall, bushy, with normal green, disease-resistant foliage, and blooming profusely and continuously from June to November.

Dooryard Delight. Hybrid tea. Originated by M. H. Horvath, Mentor, O., introduced by Melvin E. Wyant, Mentor, O. Said to be a seedling of Rosa setigera and Lady Alice Stanley. Flower is described as shell-pink inside, light rose-pink on the reverse, with light yellow bases to the petals. It has small blooms, truly double, of open form and slight fragrance. Plant is described as two to two and one-half feet tall, spreading out like a Pfitzer juniper, with dark green, disease-resistant foliage, and blooming freely from June to November.

Climbing Night. Climbing hybrid tea. Originated by John A. Armstrong, to be introduced by Armstrong Nurseries, Ontario, Cal. Said to be a sport of the hybrid tea Night, with maroon to dark red flowers, large, double, with moderate fragrance, blooming singly on long stems. Plant is described as having canes ten to fifteen feet or more in height, with dark green, medium-size foliage which mildews in California. It blooms freely and intermittently and is said to be perfectly hardy in California.

Climbing Miss Rowena Thom. Climbing hybrid tea. Originated by J. H. van Buren, Painesville, Cal., and introduced by California Roses, Inc., Painesville, Cal. Said to be a sport of Miss Rowena Thom. Flower is fiery rose and rosy mauve together with old gold, the center washed with gold, six inches or more in diameter, of full form, moderate fragrance, and blooming singly on long stems. Plant is described as really vigorous, with light green, large, disease-resistant foliage, and blooming profusely and continuously.

Red Better Times. Hybrid tea. Originated by E. R. Asmus, Sr., Closter, N. J., and said to be a sport of Better Times, resembling Better Times, except that the color is bright, clear red. The flower is large, double, high-centered, blooming singly on normal stems, and with slight fragrance. The plant under glass is described as four feet high, with dark green, medium-size foliage. It is said to be a continuous bloomer, producing about the same number of blooms as Better Times.

R. Marion Hatton, Sec'y.

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